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**Doctoral School of Economic and Regional Sciences**

**The Role of Marketing on Firm Value: Evidence from  
Arab Emerging Markets**

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## 1. INTRODUCTION

Capital markets play a crucial role in the modern economy as an important part of the financial system, they provide a good opportunity for individuals looking to increase income, at the same time provide funds to firm's operations (MISHKIN, 2004).

Nowadays, the capital market becomes the most important criteria of firm performance in the framework of maximizing shareholder's value, in other words, transfer value to investors (SACUI & DUMITRU, 2014). As well as, through the capital market, firms could get the necessary funds to promote their outputs and expand their activities (FAUZI & WAHYUDI, 2016). Therefore, firms channel all their available resources to achieve a good market value satisfies shareholder and attract potential investors. Furthermore, the capital market is an occult, where investors buy invisible products or rights which are priced totally based on received information quality or on the vendors' fidelity (BLACK, 2001).

Research efforts are still underway to solve the value puzzle in the capital market as well as to determine the explanatory factors affecting the share return, more than 300 factors have been identified for this role (PHAM et al, 2018). Inherently, firm market value is driven by many engines, where the value encompasses a set of visible factors related to measurable accounting figures as well as a wide range of indiscernible factors which create the value through the interactive channels between product and capital market.

Accordingly, on the basis of integration and overlap between the economic fields, competition between companies in the product market stretches to the capital market, in the sense that the company with a stronger market position, its shares achieve better performance in stocks exchange. (JORYAND NGO, 2017). Likewise, product market demand leads to a difference in the prospective returns in the capital market in the light of competition, all strategic and operating actions of the company interact directly or indirectly with its value in the market (AGUERREVERE, 2009). Additionally, competition is mainly connected to marketing as the most common competition tool in business by creating competitive advantages to persuade the potential customers to choose company product or services without other alternatives available in the market (BURNETT,2008), Increasingly, marketing activities have become the major driver of company performance not only in terms of traditional performance characteristics such as market share and sales growth but in terms of improving returns of shareholders (WEBER, 2002), in the same manner, marketing efforts reflect a long-term investment to achieve future benefits for a company that may be direct financial, such as returns and profitability, or may be indirect marketing such as a customer satisfaction, these benefits, in turn, contribute implicitly to explaining the value of the company (TUDOSE & ALEXA, 2017), therefore, relying on traditional standards such as sales

growth and customer satisfaction is not completely appropriate to measure the outcomes of marketing activities, without taking into account capital market measurements, for instant, LEV & ZAROWIN (1999) pointed to that association between share return and accounting profit is less significant because of the inability to include some significant and intangible elements like marketing actions.

Consequently, it is necessary to study the interaction between product market and the capital market or customer- investor connection within the “marketing-finance interface” perspective which shows the impact of the financial and non-financial elements embodied in the company's value. The meaning of that, market value is the reaction output of all available information in both financial and non-financial sides such as marketing actions, at the same time, the concept of marketing modified financially in respect of shareholder concentration when any marketing strategy or marketing spending is adopted. In other words, current research tries to answer the question: Can marketing be the potential channel for transferring influence between the producer and the capital market through its effect on value?

Additionally, understanding the intangible role of marketing in creating a sustainable corporate value would boost the current framework of financial valuation models to move closer to the actual behavior of investor in the market practically in emerging markets where there are still many phenomena and factors that need to be studied and diagnosed.

### **1.1. Motivations of the research**

Day by day, the role of financial markets and listed companies is growing, with large numbers being recorded. According to the World Federation of Exchange (WFE, 2017), the total number of listed companies was 7,06 million companies, the total value of stocks trading was \$ 3,744,001 million, while a new capital raised by share was \$ 13,713 million. On the other hand, the lack of accounting and rational models in carrying out the market value explanation task after proving that most market value returns to intangible assets which is estimated at 90% of S&P 500 market value (OCEAN TOMO, 2019). Similarly, WISNIEWSKI (2016) demonstrated that the rational economic factors illustrate a small percentage of share return volatility which is five to thirteen times more than that estimated by rational dividend discount models. As a result of the evolution of marketing implantations in the era of technological revolution, marketing has become a key function within the firm, and a significant part of budgeting and strategic orientation as well. In response to the development in both market value and marketing structure, contemporary stream of research has analyzed the non- financial and marketing determinants of firm value in long – term to bridge the gap between accounting value and marketing value from two approaches: The

first is the impact of marketing on firm value through marketing assets, while the second focuses on the impact of marketing actions on accounting firm performance and thus the firm value. Based on some economic and managerial theories, scholars use the interdisciplinary method to elucidate marketing role in firm performance such as market-based assets and resource-based theory. Additionally, literature on the relationship between marketing and company performance in capital market have used a range of measures to illustrate both sides variables, table 1 includes some previous literature with measures used in both marketing and capital market fields.

**Table 1. Measurement of variables in some related literatures**

<b>study</b>	<b>Marketing measurements</b>	<b>Firm' performance measurements</b>
CHENG et al (2018)	Marketing expenditure	Tobin's Q ratio and market share
OLIVEIRA et al (2018)	Brand equity	Stock returns
FORNELL et al (2009)	Customer satisfaction	Stock returns
JOSHI & HANSSENS (2010)	Advertising spending	Stock returns
LUO & JONG (2012)	Advertising spending	Stock returns
SRINIVASAN et al (2009)	Product innovation and marketing investments.	The explanatory power for stock returns
MCALISTER et al (2007)	Advertising and R&D expenditures	Systematic risk, derived from the capital asset pricing model (CAPM)
GRUCA & REGO (2005)	Customer satisfaction	The growth of future cash flows and reduces its variability
LUO (2007)	Consumers' negative voice	Risk of stock returns.
HUAN & WEI (2012)	Advertising expenditures, investor recognition	Implied cost of capital,
ANDERSON et al (2004)	Customer satisfaction	Tobin's Q
RAO et al (2004)	Firm's branding strategy	Tobin's Q
SINGH et al (2005)	Advertising Expenses	Market-imposed weighted average cost of capital

Source: Own construction based on literature

Researchers tried to express each side within the relationship as well as both the direct effect of marketing and with moderator variables, as a result, several valuation models have been developed to express the impact of marketing information on firm market valuation. Additionally, majority of these research have been conducted in devolved markets which enjoy a high degree of maturity and depth regarding market mechanisms and information flow which in turn influence the investor response. Based on above and in the light of the limited amount of data in emerging markets, especially Arab ones, current research attempts to test the effect of marketing application on firm

performance in the capital market by providing comprehensive model depending on a set of independent variables in addition to the moderator variables (governance) in some emerging markets in Middle East region namely, Qatar, Dubai, Abu Dhabi, and Kuwait. That is, the research aims to discover the role of marketing application as a channel of value transformation between product and financial market which is shown in figure 1. On other words to answer the question to what extent can the results of marketing - firm value in developed markets extend to their emerging counterparts? As well as what is the expected role of governance quality in marketing-firm value relationship?

The context of Arab emerging markets provides a worthy environment to answer the question above also to know the extent to which the results obtained from the developed markets can be applied in different economic environment. Furthermore, a new approach of marketing as a long-term investment requires sufficient strategies employing to ensure a sustainable interest of customer and investor simultaneously that could be an efficient path to enhance firms' resources in emerging markets. Moreover, governance quality presented by agency cost, ownership concentration, and earning quality are expected to boost performance and ensure the optimum utilization of firm's resources including marketing function performance, which can add a managerial dimension to the proposed research model.

## **1.2. Importance of research**

From the scientific view, the research highlights the impact channel of marketing on listed firm performance based on literature review, in sense of relationship analysis between marketing variables and firm value in terms of the theories and mechanisms control this relationship, which can be fuelled the debate of financial and marketing strategies integration. In addition to providing a new model and evidence from emerging markets which differ from developed markets in both marketing practices in product market and in investment practices in the capital market, that can be a first step to develop more models in the framework of marketing- firm value relationship.

From the professional view, the managers and decision makers can use this interdisciplinary approach to maximize the shareholders' wealth. further, marketing models could contribute to explanation the investor behaviour in a market where financial rational models failed to do efficiently. On other words, understanding investor- costumer integration could provide a convenient arrangement between financial and marketing decision makers within firm organizational structure. Briefly, marketing – Finance integration can be an effective tool for obtaining an outstanding evaluation of the market.

### **1.3. Objectives of research**

- 1) To define a new approach to marketing.
- 2) To explain the interaction between finance and marketing fields.
- 3) To determine the nature of the relationship between marketing and financial performance in emerging markets.
- 4) Proposing a model to predict the firm value based on marketing variables.
- 5) To identify the role of proposed moderating variables in the model.
- 6) Comparison of the studied markets in terms of marketing – firm value relationship.
- 7) Provide recommendations that could enhance the current situation in market under study in general and regarding the research variables in particular.

### **1.4. Hypotheses of research**

**H1:** There is a statistically significant effect of marketing on firm value in the markets under study.

**H2:** The agency cost of company moderates the relationship between marketing and firm value

**H3:** The ownership concentration of company moderates relationship between marketing and firm value.

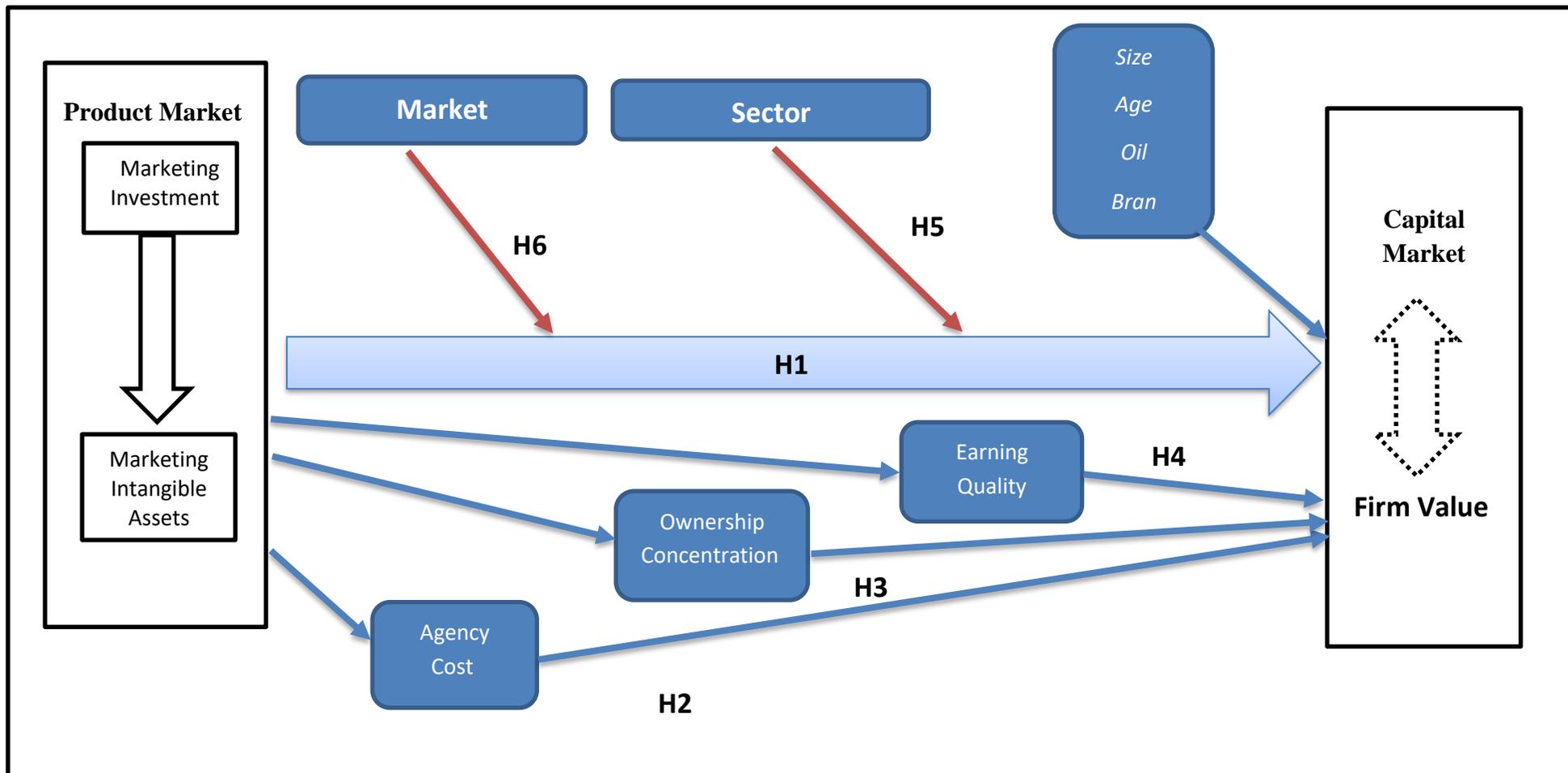
**H4:** The earning quality of company moderates the relationship between marketing and firm value.

**H5:** The relationship between marketing and firm value in financial companies differ from non-financial.

**H6:** The markets under study differ regarding the relationship between marketing and firm value.

### **1.5. Research structure**

In order to capture aspects of the research questions, the research was designed to include an adequate theoretical framework that is consistent with what was stated in the literature and to be supported by a practical section to test hypotheses statistically. The research consists of four chapters in addition to the introduction, the second chapter presents the related theories and mechanisms of marketing – firm value relationship starting by a new approach of marketing then the impact of some marketing element (assets and actions) on firm value has been presented. Additionally, the background of Arabic emerging markets with focusing on four markets under study has been presented. The third chapter includes the sample procedures, econometric model description and variables measurements as well as the statistical methodology, while the fourth chapter deals with statistical analysis and results deduction. Finally, some remarks points have been presented and some recommendation have been suggested in the fifth chapter.



**Figure 1. Conceptual model of research**

Source: Author's own construction

## 2. LITERATURE REVIEW

Based on the objectives of the current research in determining the role of marketing in firm value, the theoretical framework of the marketing impact on firm value was addressed in this chapter. Starting from capital and product market interaction aspects, second, some framed scientific theories are explained to display the methodological roots of relevant literature of relationship between marketing and finance. After that, the common marketing elements that used in previous studies are presented in the light of the modern approach of marketing. Finally, a literature analysis is made to highlight the research gap especially to the relevant objectives and methodology of this research work.

### 2.1. Capital market - product market interaction

According to financial economics literature, capital market, like any other market, is subject to the accepted economic rules, which frames the interactive relationship between it and the product market (FILATOTCHEV et al, 2016). Table 2 involves the most important criteria to compare the product and capital market in terms of information nature, product Properties and the structure of buyer-seller interaction

**Table 2. Comparative criteria of product and financial markets**

Criteria	Product market	Capital market
Informational Production environment	Dispersed	Concentrated
Types of good traded	Consumption good	Investment good
Buyer and seller linkage	Until the point of sell	Beyond the point of sell
Information collection intensity	At a single point of time	Collection and dissemination are continual
Information friction	Transportation and storage	Costs of transaction, taxes and regulation and agency
Source of arbitrage	Arbitrage in space	Arbitrage in time

Source: FILATOTCHEV et al (2016)

Information environment in capital market is more concentrated and continual process due to high sensitivity level of transaction to available information related to financial instrument which in turn is characterized by unique specifications in terms of nature and the expected benefit acquisition, that differs from the general status of the marketing product, the same is extended to

relevant costs, where investment transactions related to some regulation costs like commissions and tax. In addition to other hidden costs resulting by organizational connection within the listed company structure such as agency costs. Finally, through its pricing mechanism capital market provide a permanent opportunity to achieve profit by holding the financial product to benefit from expected future return.

However, it is familiar to talk about product market impact on capital market practically in the light of financial market efficiency theory developed by FAMA (1970) with the aim to find a convenient model of financial assets pricing based on the ability of prices to reflect all available information according to three levels, weak related to historical information, semi-strong related to public available information, and strong level when prices reflect all information related to previous two levels in addition to private (unpublished) information (FAMA, 1970), consequently product market information about the individual firm or about the industry should be included within capital market prices. Consistently, product market imperfections extend to capital market, where some remarks can be recorded regarding the firm that enjoys high level of monopoly in product market: (1) has larger trading volume, (2) its stock price absorbs relevant information faster, (3) has higher stocks liquidity level, (4) has less level of return volatility (PERESS, 2010).

From the opposite side, capital market affects product market based on some phenomena, firstly, capital market is the market of funding that drives business operations by increasing the investment opportunities in product market, meaning that capital market response to firm needed funding determined business size and plans and therefore its market share comparing to competitors (FRESARD, 2010). In the same layout, CAMPELLO (2006) displayed the positive correlation between mild debt portion in financial structure and sales volume while the big portion of debt leads to substandard performance in product market.

From industrial organization point of view, the interaction between these two types of markets pushes towards equilibrium in the industry level through information channel particularly the information of capital structure and relevant securities prices which can be observed by competitors as a basis to forecast the following investment and operation decisions which in turn leads to product market equilibrium (ZECHNER, 1996). On other hand, agency conflict between managers and shareholders plays a significant role in manager decision limitation in product market, for example; investors may push towards adopting a specific technology motivated by cost regardless of effectiveness, due to their fear of managers wasting working capital, as a result fewer companies will invest in more effective technology that determines the industry competition level

especially with entrepreneur companies where the funding shortage boost the impact of capital market on product market (RIORDAN, 2003). Furthermore, capital market affect product market in relation to investor type, institutional investors have considerable power to make decisions proportional to their ownership for example venture capital who influence a product market strategy of companies they are financed that constraints their innovation strategic behaviour in product market (HELLMANN & PURI, 2000).

Depending on high intersection between both markets, it is difficult to study either one independently of the other, meaning that any event in the product market must be reflected in the movements of the financial market and vice versa, knowing that most of the interaction mechanisms connected to industry competition where marketing activities could be possible channel to transfer the reciprocal influence between the two sides. This gives considerable importance to studying the contribution of marketing to firm value creation.

## **2.2. Listed company performance and marketing**

Nowadays, Joint Stock Companies have become a sturdy economic body dominate a considerable part of countries' economy, due to size and power impact on one hand and the ownership structure where the equity is divided over a large number of owners on the other hand. (POST et al, 2002). More than that, corporations are a basic constituent of the capital market provide the products traded within the market, and receive the value of their securities, so market value creation has presented the most important measure of performance, meaning that "maximizing shareholder value" is the authentic goal of listed company, the higher the value of investors, the more successful the company will be (SACUI & DUMITRU, 2014).

Furthermore, the objectives of many stakeholders overlap with the activities of the company such as suppliers, customers, shareholders, lenders, investors, government etc.... According to stakeholders' theory developed by Freeman in 1977, managers must direct all functions towards achieving stakeholders' goals (FREEMAN, 2010).

Despite ongoing controversy over management's adoption of a value-maximizing approach or stakeholder approach, it can be said that achieving good value in the market contributes significantly to the goals of many stakeholders and even at the community level (JENSEN, 2000). Continuously, corporate finance theories focus on maximizing the value of the company for three considerations as follows (DAMODARAN, 2014):

- 1) securities prices are the most noticeable of all measures that can be used to evaluate the performance of a listed company. Dissimilar to profit or revenues that are issued at one time

every quarter or every year, the market prices are modified permanently to reflect the investors' response to every action that the company takes. In the general market, the behaviour is more doubtful about management information.

- 2) Accounting measures focus on short-term results of a company such as profits, sales and market share, while securities value reflect the long-term results of company decisions. Therefore, they play a role in the long-term radar of health and outlook of the company.
- 3) The market value provides a fit method to make conclusive decisions about projects and finance them by taking the opportunity to exam the decisions with the experimental investigation.

Based on the above, all functions and administrative units within the company share the objective of maximizing market value, Specifically marketing, which, despite its great importance, has been neglected for a long time in the company valuation issue for the benefit of financial numbers (RYOO et al, 2016), since the managers and financial decision makers were not aware of the importance of marketing performance measurements like customer satisfaction, sales growth, awareness, customer loyalty, repeat purchase and market share as well as, whether these measurements are of interest to investors or not (MCALISTER et al, 2007). As a result, a debate has been raised about the organizational power of marketing division within relative literature to indicate to what extent it can affect firm performance (O'SULLIVAN & ABELA, 2007). Virtually, firm unites aim to deal with uncertainty status of business that highlights the marketing mission as a bridge with external environment such as customers, market information, and competitors. Therefore, by providing certainty to other organizational unites, marketing plays a crucial role in business value chain which called “shock absorber function” (AUH & MERLO, 2012). Likewise, the growing power of marketing boosts shareholders returns in the long run since marketing department focuses on long term goals achieving more than operational procedures thus efficient marketing strategies guide the business decisions to emphasize on financial long-term performance more than short term revenues, in other words, a successful marketing department increases investment strategies effectiveness on a company- wide level (FENG et al, 2015). The same result had been confirmed by PORTO & FOXALL (2019), who concluded that marketing elements reinforced firm outputs financially through market share acquisition during economic growth period and through return on assets and Tobin's Q ratio during economic slowdown period.

Since firm value is the comprehensive benchmark of performance, marketing tasks have expanded to include a wide spectrum of parties and applications in order to comply with capital market requirements, in particular, the move towards improving the value of the company as one of the

key marketing objectives, as well as adding shareholders and potential investors within marketing stakeholders (HOFFMANN & PENNING, 2008). These developments led to a new trend in marketing depend on the correlation between marketing and financial elements in the framework of the firm's value in the capital market.

### **2.3. Marketing-finance interface: A new trend in marketing**

29 years ago, Harvard Business Review (1991) had predicted the current importance of marketing by saying "*marketing is everything and everything is marketing*". According to American Marketing Association (2007), "Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large" which is consistent with the modern nature of the Joint Stock Companies and the diversity of their operations (GUNDLACH & WILKIE, 2007). Furthermore, many scholars have endeavoured to explain the relationship between marketing actions and company performance from the market orientation view (ATUAHENE-GIMA et al, et al, 2005; KIRCA et al., 2005; PERRY & SHAO, 2002), from marketing strategies view (CAVUSGIL & ZOU, 1994; AGIC et al, 2016).

With respect to marketing and financial comparison, ZINKHAN & VERBRUGGE (2000) illustrated that although it is common for both fields to be different in the way phenomena are studied "difference thought words", but they have the same economic roots, and they can be integrated, some characteristics have been mentioned as a variances between the two disciplines such as the difference in relation to the main stakeholder, perspective, independent and dependent variables, research methods, data used and time frame.

On the other hand, although research of marketing have utilized other fields such as Psychology and Sociology, they neglected the close relationship with finance until the late 1980s and early 1990s, this is due to some differences, firstly, the difference in data focusing where marketing use customer and product data while financial research use data from company level. Second, the difference in data type, where marketing depends on primary and secondary data, while finance prefers capital market- derived data or company's financial statements. Third, the difference in scientific goals, while marketing has been trying to define its scop to gain a niche among economic sciences, the financial research have been moving more towards topics of firm value maximization. (HYMAN & MATHUR, 2005).

However, relying on traditional standards such as sales growth and customer satisfaction is not completely appropriate to measure the outcomes of marketing activities, without considering financial performance measurements that lead to the company's original goal of maximizing owners' wealth. In other words, the relationship between product market and capital market is reflected in the interaction between marketing and other functions within the company, especially finance, in response to changes in business as they became more market oriented. So, literature analyzed and still have discussed the impact of marketing applications on firm performance on one hand and ways in which it affects particularly in long-term (ANDERSON, 1979; RATNATUNGA & HOOLEY, 1990).

From the viewpoint of cross-functional relationships, the information exchange between the two division in the context of relational behaviour is high, Further, the synthesis of marketing and finance aims in maximizing the value of both shareholder and costumer contributes to the company's long-term success and sustainability (RUYTER & WETZELS, 2000). In other words, all financial strategies encompass marketing results for example, when expansion strategy is adopted by the company to boost share value, is essentially dependent on sales increasing (DWIVEDI, 2007).

In the capital market, the “marketing-finance interface” perspective shows the impact of the financial and non-financial elements embodied in the company's value, for instant, LEV & ZAROWIN (1999) pointed to that association between share return and accounting profit is less significant because of its inability to include some significant and intangible elements like marketing actions. As well, WISNIEWSKI (2016) demonstrated that the rational economic factors illustrate a small percentage of share return volatility which is five to thirteen times more than that estimated by rational dividend discount models. In essence, this emerging mainstream is based on a set of assumptions included in Table 3 below where nine standers have been enumerated to distinguish between traditional and emerging assumptions.

**Table 3. Comparative assumptions about marketing-finance interface**

<b>Criterion</b>	<b>Traditional assumptions</b>	<b>Emerging assumptions</b>
Purpose of marketing	Create value for customers; win in the product marketplace	Create and manage market-based assets to deliver shareholder value

<b>Criterion</b>	<b>Traditional assumptions</b>	<b>Emerging assumptions</b>
The relationship between marketing and finance	Positive product-market results translate into positive financial results	Marketing-finance interface must be managed systematically
Perspective on customers and channels	The object of marketing's actions	A relational asset that must be cultivated and leveraged
The input to marketing analysis	Understanding of the marketplace and organization	Financial consequences of marketing decisions
Conception of assets	Primarily specific to the organization	The result from the commingling of the organization and the environment
Marketing decision-making participants: internal	Principally marketing professionals: others if deemed necessary	All relevant managers irrespective of function or position
Marketing stakeholders: external	Customers, competitors, channels, regulators	Shareholders, potential investors
What is measured	Product-market results; assessments of customers, channels, and competitors	Financial results; configuration of market-based assets
Operational measures	Sales volume, market share, customer satisfaction, return on sales, assets, and equity	The net present value of cash flow; shareholder value

Source: SRIVASTAVA et al (1998)

Marketing-finance interface presents a set of new marketing tasks within the marketing system, regarding marketing inputs, marketing actions are managed in parallel with financial actions to achieve the same goals as well as market information analysis goes beyond feedback analysis to deal with the expected financial results based on this analysis. Furthermore, a new approach deals with assets concept as a result of firm- environment interaction which reflected into marketing

decision making mechanisms which requires all relevant organizational units' participation to take in account the interest of shareholders and potential investors in capital market, therefore market-based assets generation is the most important indicator of marketing performance which consistent with market value measurement as the sum of future cash flow. Sturdy entanglement between marketing and capital market parameters promotes the financial orientation of marketing as a strategic option of listed companies.

The crux of the matter, due to the growing importance of firm value goal, marketing traditional tasks should be modified by marketing-finance interface perspective to get a deeper understanding about marketing aspects and mechanisms which determine the size and range of contribution to solving the puzzle of market value.

#### **2.4. Framed theories of marketing role on financial performance**

The correlation between marketing phenomena and financial value falls under many of the company's management and financial theories adopted by scholars as an interdisciplinary method to elucidate marketing role in firm value. Generally, firm theories focus on the firm as a combination of productive resources, administrative organization, contractual and noncontractual arrangements, and versatile interaction system, the contemporary business models are integrated into marketing application in the complicated environment, where marketing strategies are the fundamental means of the distinguish performance (FOXALL, 2019).

Both Resource based theory and market-based assets theory will be discussed as the main pillars in framing the relationship between marketing intangible assets that prompt the investment outputs of firm system and the firm value which presents the desired achievement of all activities.

##### **2.4.1. Resource-based theory**

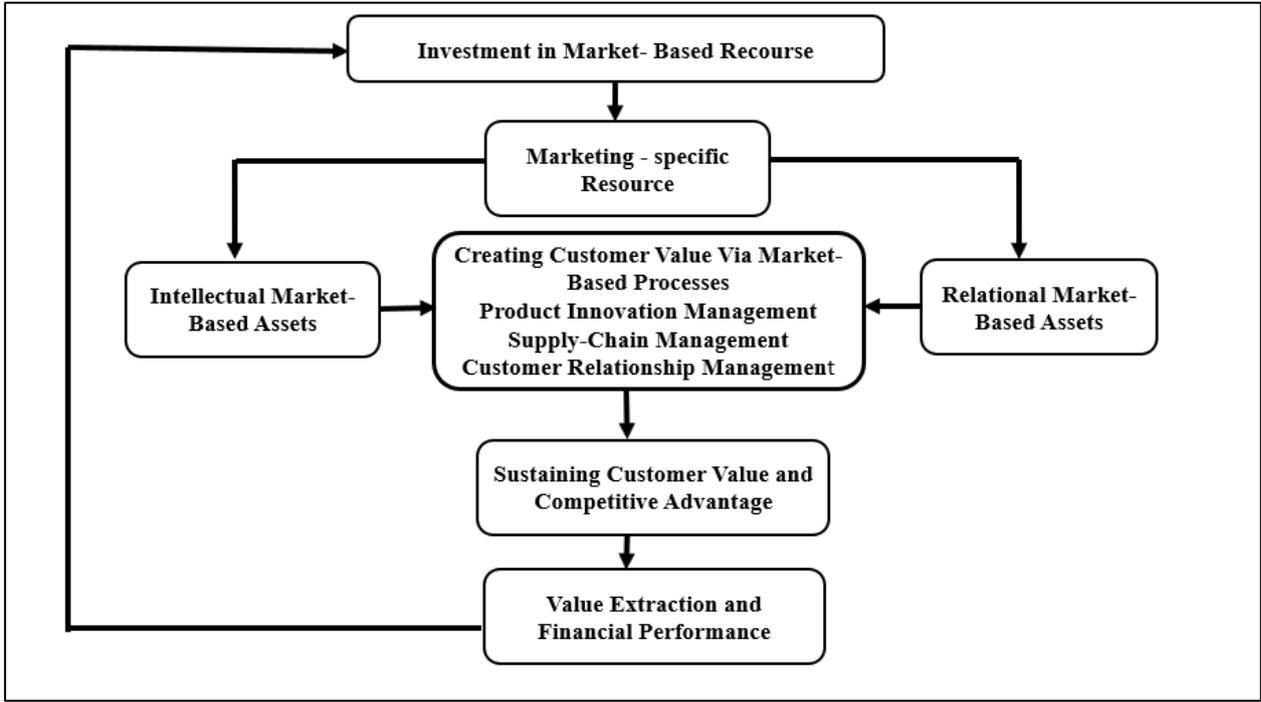
Resource-based view RBV or resource-based theory RBT depends on the principle that organization owns vary forms of resource and capabilities, by which can enhance the performance (SONG et al, 2007), while the capabilities refer to package of skills and knowledge which help company to manage its activities and exploits its assets efficiently, and the success of the company depends on its ability to generate new resources and improve its capabilities to gain competitive advantage (KAMBOJ et al, 2015). As well RBT provides a significant frame to clarify the backbone of a company's competitive advantages – performance interaction (BARNEY et al, 2011).

According to KOZLENKOVA et al (2014), the roots of the theory return to Penrose in 1959 who explained the importance of the organizational resource, but its widespread use began in the 1980s

at the industry level and hence the concept of internal factors at the company level that contribute to earnings.

On the other hand, competitive advantage is produced when the company achieves economic benefits outperform competitors in the market (PETERAF & BARNEY, 2003), and these advantages become sustained when the competitors cannot achieve the same benefits by adopting the same strategies (BARNEY & CLARK, 2007) as well as it is possible to ascertain whether the resource can be able to generate a sustained competitive advantage by VRIO analysis that includes four features of resource: Valuable, Rare, Costly to Imitate, and Organized to capture value (KOZLENKOVA et al, 2014).

From the marketing side, SRIVASTAVA et al (2001) tried to answer the question of "how to convert the available resources to value for customer by using marketing capabilities, they put analytical paradigm (included in figure 2) of the role of RBT in marketing through market-based resources that create higher value for customer which in turn leads to competitive advantage as well as better performance.



**Figure 2. A framework for the analysis of market-based resources**

Source: SRIVASTAVA et al (2001)

The investment cycle of marketing assets demonstrates the role of customer orientation strategy as a sustained resource based on added customer value which in turn generate the positive financial results and firm value as well.

Furthermore, resource-based view is used in the stockholders marketing structure, where the network of stockholders represents the resource of the company while company dealing with

stockholders' issues represent the capabilities which create the competitive advantage and upper performance comparing to competitors (KULL et al, 2016).

A vast group of research based on RBT study the relationship between marketing capabilities and firm performance in capital market, ANGULO et al (2017) investigated the relationship between marketing measured by advertising and promotion spending and long-term performance measured by stocks returns measured by three-factor model as a Capital Asset Pricing Model, the findings show that performance is affected by marketing capabilities directly and indirectly by the growth of assets and profit as intermediary variable. likewise, the influence of strategic orientations on firm performance has been extensively studied in extant marketing scholars. By demonstrating the role of various marketing strategies adopting on improving the performance of the company in subsequent periods (JAAKKOL et al, 2016), as well marketing actions influence share value through cash flow, such as the impact of advertising on firm value which is through creating some resources and competitive advantages like the brand. This effect may also be indirect by ensuring more stable and growing cash flows which in turn moves to market value or has a direct influence over the behaviour of the investor who prefers the shares of the highest-intensity advertising companies (SINGH et al, 2005).

In short, RBT provides a logical approach to a deeper understanding of the impact of marketing variables as the internal engine on the financial variables of performance by using competitive advantage and marketing capabilities concepts, in the sense that marketing plays a basic role in boosting and create resource of the company's strategies on the one hand and in enhancing long-term competitive advantages on the other hand.

#### **2.4.2. Market-based assets theory**

The asset is a storage of value and future usefulness, where the holder can gain benefits by utilizing it in the present accounting period or from the past period (HARRISON, 2006). Also, it was defined as organizational, material, and human features that the firm obtains and improves by specific strategies to achieve both internal (organizational) and external (marketplace) objectives. (HUNT & MORGAN, 1995; SACUI & DUMITRU, 2014). Moreover, assets are classified into two main categories: tangible which presented by physical form and intangible which cannot be visible or identified physically (MEHTA & MADHANI, 2008), currently intangible assets have gained more attention as a result of a new business model in technology firms such as Amazon and Google witch established as a software and human investments (MIYAGAWA et al, 2014), and because of a several transactions of companies have been sold at much higher prices than recorded book values of assets. Besides that, 80 percent of listed companies on USA and UK markets return to intangible assets valuation (MCDONALD, 2009), the same applies to

macroeconomic indicators where significant value is neglected in the computation of published economic information, the addition of intangible capital leads to a fundamental change in economic growth parameters (CORRADO et al, 2009).

Consequently, the valuation and classification of intangible assets are one of the imperative issues for the accounting practices, so International Accounting Standard Board IASB issued IAS 38 in 1998 to explain the accounting settings of intangible assets. In addition to the capitalization requirements for certain costs such as R&D costs as recognition of the role of these assets in value (IASB, 2009). As well as IFRS3 divided the intangible assets into five parts as in figure.3 below. Despite what is stated in international standards, a large part of intangible assets is still not disclosed or underreported on the financial statements (BRAND FINANCE INSTITUTE, 2017), since it is not easy to determine appropriate approach of valuation despite the conclusive evidence about the contribution of these assets to the value of the company (BANK et al, 2019). Meaning that intangible assets are essential driver of value in capital market regardless of accounting policies failure in providing appropriate values of this type of assets.

Categories of intangible asset under IFRS 3				
Marketing-Related Intangible Assets	Customer-Related Intangible Assets	Contract-Based Intangible Assets	Technology-Based Intangible Assets	Artistic-Related Intangible Assets
Trademarks, Tradenames	Customer lists*	Licensing, royalty, standstill agreements	Patented technology	Plays, Operas and ballets
Service marks, Collective marks, Certification marks	Order or production backlog	Advertising, construction, management,	Computer software	Books, magazines, newspapers and other literary works
Trade dress (unique colour, shape, or package design)	Customer contracts & related customer relationships	service or supply contracts	and mask works	Musical works such as compositions, song lyrics and advertising jingles
Newspaper		Lease agreements	Unpatented	Pictures and photographs
Mastheads	Non-contractual customer relationships*	Construction Permits	Technology*	Video and audio-visual material, including films, music, videos etc
Internet domain Names		Permits	Databases*	
Non-competition agreements		Franchise agreements	Trade secrets, such as secret formulas, processes, recipes	
		Operating and broadcast rights		
		Use rights such as drilling, water, air, mineral, timber cutting & route authorities		
		Servicing contracts such as mortgage servicing contracts		
		Employment contracts		

**Figure 3. Categories of intangible assets under IFRS 3**  
Source: BRAND FINANCE (2016)

In marketing aspect, sales and profits present the tangible part of assets which are measured simply by accounting numbers, while the other intangible part is more difficult with regard to measurement, as well as in their impact on the performance like customer loyalty and brand (JOSHI & HANSSENS, 2008). So, market-based assets refer to intangible assets created by the

firm during its interaction with the market it operates in (DOYLE, 2000), they lead to progress the adequacy and competence of firm in its market by using various marketing actions (BARNEY, 1991). According to SRIVASTAVA et al (1998), market-based assets play a principal role in both financial value creation and customer value because they meet the following four specifications:

1. convertible: when the firm is able to utilize these assets to take the opportunity or avoid the threat of the external environment, thus the possibility of value creation is increased.
2. Scarce: if the asset is owned by competitors, its possibility to be a source of continued value is reduced.
3. Immutable: the competitors cannot easily imitate the asset; the possibility of value creation is increased.
4. There is no substitute of asset: when the competitors cannot own the perfect tantamount of assets as well as it is hard to create one, the possibility of value creation is increased.

SRIVASTAVA et al (2001) showed that market-based assets consist of two parts: first is a relational market-based asset which is created by relationships with external parties of firm such as clients, agents, distributors, society and government, this type depends on reputation and trust, also it is not possessed by the firm but generally accessible to it within the external environment. The second part is intellectual market-based assets that refer to the firm knowledge about external environment parties, this knowledge involves understanding, presumptions, and beliefs. Also, intellectual capital consists of human and structure capital enclosed in customers, processes, databases, brands, and systems (CHEN et al, 2005).

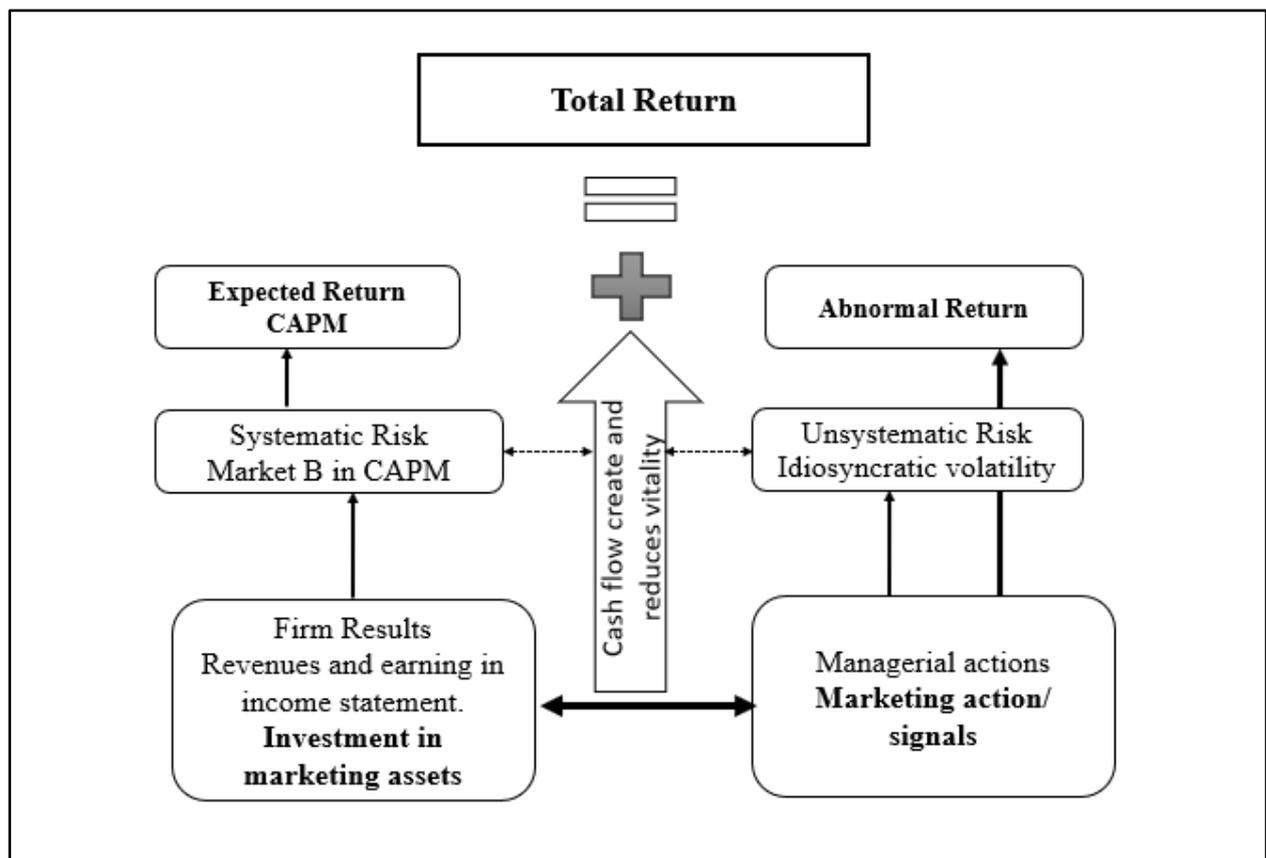
The marketing assets provide a logical explanation of the marketing role in bettering the firm financial performance, where the core mission of marketing is to manage and enhance these assets which in turn represent the connecting viaduct between marketing strategies and firm value (KIM & RICHARME, 2010), inherently market based assets are integrated into firm cash flows, as a long term investments, marketing assets affect firm performance and thus the shareholder value through accelerate, enhance, reduce volatility and enhance residual value of cash flows (SRIVASTAVA et al, 1998), in other words, any marketing expenditure related with actions like market research, advertising, personal selling, sales promotions, public relations, direct marketing and other types of communications mostly have both long term and short term effect on firm performance, so it is difficult to decide which part of marketing cost is long term investment and which is operational costs (SACUI & DUMITRU, 2014), while the rapid impact of sales promotion can be discerned in a short period, other activities such as advertising and service

quality affect future performance periods. By the same logic, market-based assets participate in portion of short-term profits, and at the same time increase the possibility of sustainable growth in the long-term (RUST et. al, 2004). For example, customer equity became a central reason for upper results, where the long run value of firm depends on the strength of the relationship between firm and its customers (HOGAN et.al, 2002). In the sense that financial investment participates implicitly in market-based assets building, for example, the financial statements of Apple corporation show that \$ 933 million as advertising expenses, but the corresponding asset for these costs is the brand value of \$87.1 billion (BADENHAUSEN, 2012).

## **2.5. The relationship between marketing and firm value**

A plethora of research has studied the relationship between marketing actions on the one hand and financial performance and value by using a range of measures to illustrate the variables on both sides on the other hand. In this context, the influential marketing elements on firm value are divided into two main groups: the first embodies the marketing assets that are added and strengthened through marketing activities such as brand equity, customer satisfaction, customer equity, and R&D and quality, while the second group represents the adopted marketing strategies through the marketing mix such as advertising, new product introduction, price promotion, and distribution channels (SRINIVASAN & HANSSSENS, 2009). The relevant variables of research will be discussed in the following sections. Furthermore, the interaction between two parts of variables could be clarified within the framework of return and risk in the financial scope (figure .4), starting from that the share return has two components, the first is expected return calculated by capital asset pricing models CAPM based on systematic risk  $\beta$  of market portfolio return average (FAMA & FRENCH, 1992), which led by financial firm results and nonfinancial results of marketing assets investment, while the second component comprises the abnormal return of unsystematic (idiosyncratic) risk which explained by managerial actions in the firm (GOYAL & SANTA-CLARA, 2003), where the marketing actions/ signals contribute to this type of return through the impact on firm cash flow. In the sense that the share return and thus the firm value is determined by the incorporation between the financial results and managerial decisions.

Abnormal return generation workflow is compatible with competitive advantage conception where the normal investment decisions lead to expected return the market limitations while marketing strategies decisions lead to return level exceed market return, on other words, marketing could be an efficient mean to satisfy the investor's requirements.



**Figure 4. Marketing in the framework of return and risk**

Source: modified based on SRINIVASAN & HANSENS (2009)

Theoretically, efficient-market hypothesis EMH states that the current price of the security reflects all available financial and nonfinancial information about the company and events related to the future cash flows, and the price is adjusted to include any new event or information when it unfolds (FAMA, 1970). In the same logic, marketing actions can draw the investor’s attention to new information or confirm existing information about the company in general or about a specific part of its operational process in both individual and industry level that affects investor response and therefore the stock price, further, the level of expected cash flow determines the adoption of marketing strategies that are alternatives to each other over time, such as the success in the strategy of introducing the new product effectively limits the use of promotion strategies and vice versa (DEKIMPE & HANSENS, 1999). In short, marketing actions play a role in the company's cash flow forecasting, so it can take the first direct way through the response of the investor to the received signs that defines the financial instrument attractiveness. While the second indirect way by creating marketing assets as a result to accumulative marketing investment that contribute mainly to improving the firm value.

### **2.5.1. Marketing assets and firm value**

The marketing assets manifest the capital accumulation resulting from the marketing investment, they are the long-term outputs of the various marketing efforts, in this part the most important marketing assets that were highlighted in the financial- marketing literature will be reviewed in the light of firm value relationship, specifically related to the customer equity and innovation presented by R&D investment. In addition to the brand.

#### **2.5.1.1. The role of customer satisfaction and customer equity**

Customers are the value main driver of company, today, it is normal for companies to invest in increasing customer satisfaction as a vital part of their marketing budget. Maintaining and increasing customers means maintaining and increasing cash flows (SUM & KEM, 2013). Similarly, the customer satisfaction as a result of customer loyalty became an efficient measure of company's strategies success as well as a measure of financial outputs of marketing (GUPTA & ZEITHAML, 2006). Therefore, the impact of customer satisfaction on the list firm performance has been covered by several research with measuring this effect on a group of financial indicators. LUO et al (2010) Shows that the correlation between change in customer satisfactions and change in return and risk of company mediated by analysts' stocks recommendations. By incorporating the profit as a short-term target in analyzing the relationship between consumer satisfaction and the firm value, SULLIVAN & MCCALLIG (2009) found that consumer satisfaction measured by American Customer Satisfaction Index (ACSI) affects positively the firm value. On the other hand, the customer satisfaction information presents a reliable signal to motivate the investor's response to the company (FORNELL et al, 2009). For example, Dell's customer satisfaction score went down in August 2005 by 6.3%, the share dropped by 12.5%. From cash flows perspective, the consequences of customer satisfaction could be positive such as loyalty and willingness to pay which accelerate a firm cash flow (AKSOY et al, 2009).

Furthermore, the concept of customer equity refers to the lifetime value of current and future customers, more specifically, it is the current value of customer's revenue to a company, it is driven by brand equity, value equity and retention equity (ZHANG, 2016). In the same context, customer equity as an intangible market asset I provide a credible proxy for firm value and characterized as appropriate approach regardless of firm lifecycle period remarkably during growth peak or negative profit where the traditional financial models could not be applied smoothly (GUPTA et al, 2004), which has been confirmed in the subsequent literature that the customer equity is a functional predictor of firm value in the market (TSAO & CHAO, 2015).

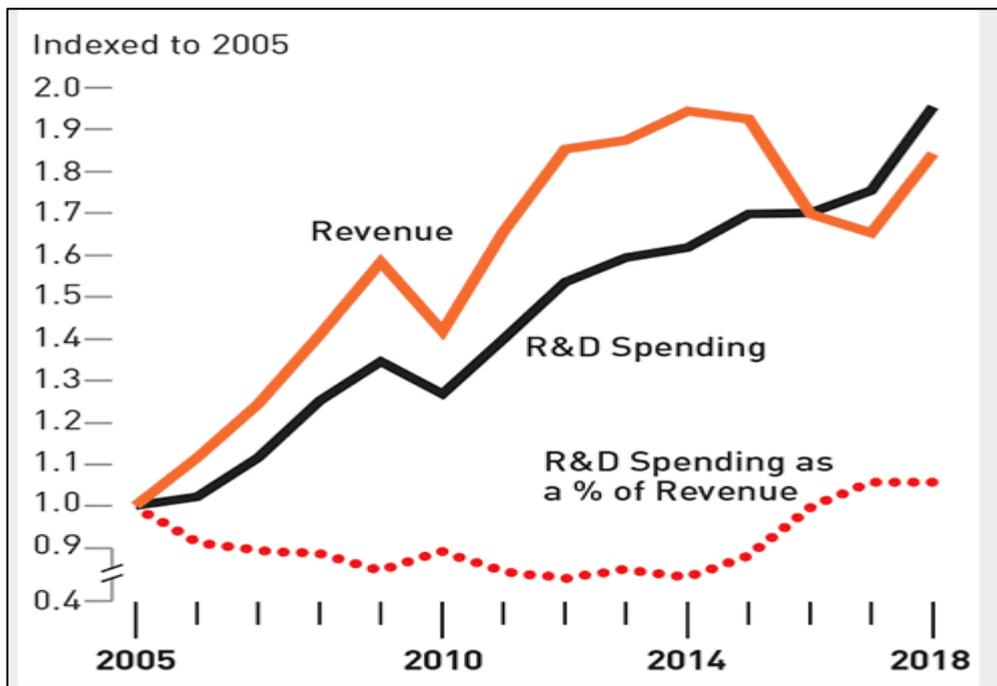
Also, the customer equity supported by marketing strategies not only leverage the value but beat the market expectations as well (KUMAR & SHAH, 2009). Because of focusing on cash flow created by current and potential clients, customer equity provides good inputs for strategic decisions based on sustainable competitive advantage which in turn contribute to long term firm value. In contrast, market share criticized as an uncoherent measure interest in sales in the short term (LEMON, 2001). Moreover, customer equity components such as retention, margin, and acquisition costs enhance the firm value from on the one hand and reduce the cost of capital on the other (GUPTA et al, 2004).

WIESEL et al (2008) demonstrates that the customer equity information could bridge the gap between reported accounting information and firm value since it provides more reliable reference about firm development, strength and advantage aspects, the proposed information like change of customers' number, customer retention, customer cash flow and change in components of customer equity.

In summary, customer is the core of decision maker interest which leads all the other functions in the firm, consequently, modern customer metrics used beside the traditional accounting metrics offers an efficient interdisciplinary approach to subject the issue of value gap as well as to provide an advantage to improve the value in both capital market and product market.

#### **2.5.1.2. The role of R&D**

Nowadays, business world has a lot of successful companies evidences due to their competitive strength in terms of continuous innovation, research and development, where research and development activities give a fundamental competitive advantage that drives value creation by enhance the level of product quality (KIM et al, 2018). R&D investment (intensity) measured by the percentage of R&D spending of total revenue presents a notable portion of company expenses which grow regularly in the worldwide (STRATEGY&, 2018). Based on data of the most 1000 innovative listed companies presented in figure 5, Where it is observed that the steady growth of R&D spending is associated with greater revenue growth, as an indication of the importance of spending as a worthy investment by adding value to the company.



**Figure 5. R&D trends in the most 1000 innovative companies from 2005 to 2018**

Source: STRATEGY& (2018)

The long-term investment of R&D builds the quality asset as a sustain resource of value, so the International Accounting Standards IAS guides capitalization of development expenses in IAS 38, as it contributes to creating benefits for the company like other intangible assets (DELOITTE, 2019).

Figure 6 shows the most innovative companies in the world and the change in R&D spending in 2018 comparing to 2017, it is noted that these companies are classified among the blue chips shares in their markets on the one hand and R&D spending has increased in most of them on the other hand. Indeed, innovative leading companies are usually rated higher in the market due to investor confidence in their ability to continuously develop products, deliver innovative, and improve performance. Therefore, it has more follow-up rates from market players (RUBERA & KIRCA, 2012). In the sense that the leading companies globally invest in R&D as a key tool to maintain their competitive position in the long run.

RANK			R&D spending		
2018	2017	Company	2018 US\$ Billions	% of Revenue	Change from 2017
1	1	Amazon	\$22.6	12.7%	40.6%
2	2	Alphabet	\$16.2	14.6%	16.3%
3	5	Volkswagen	\$15.8	5.7%	14.1%
4	4	Samsung	\$15.3	6.8%	6.8%
5	3	Intel	\$13.1	20.9%	2.8%
6	6	Microsoft	\$12.3	13.7%	-5.7%
7	9	Apple	\$11.6	5.1%	15.3%
8	7	Roche Holding	\$10.8	18.9%	-8.7%
9	12	Johnson & Johnson	\$10.6	13.8%	16.0%
10	8	Merck	\$10.2	25.4%	0.8%
11	11	Toyota	\$10.0	3.9%	2.6%
12	10	Novartis	\$8.5	17.0%	-11.1%

**Figure 6. R&D spending of the most innovative companies in 2018 (in billion U.S. dollar)**

Source: STRATEGY& (2018)

Considering competition, the search for suitable growth opportunities turns into an ongoing process to meet the needs of customers and thus investors in the financial market by adopting the necessary innovative strategies beside a new or improved product (IKE & KINGSLEY, 2010).

From worldwide perspective and by linking the R&D intensity with competition level, GUPTA et al (2017) exams the impact of R&D on market valuation in both the developed and developing countries, the positive effect was limited to industries with little competition in developing countries, while R&D affected market value measured by TQ at all levels of competition in developed countries. In the same manner, in developed countries of G-7 the R&D investment influences in the same direction on firm value in both the same year and the previous year of investment while it influences negatively on fundamental performance indicators in the previous year (USMAN et al, 2017). On regard to market level, the findings of US market refer that R&D spending contribute significantly to profit of company and in turn its value, on other words, the R&D investment motivate the innovations implications in the first stage, and the capital accumulation to generate the value in the second stage (WARUSAWITHARANA, 2015). Likewise, in European region, DUQI & TORLUCCIO (2011) by using residual income model pointed out that despite the dissimilarity of significance degree among European countries, R&D

expenditure has a positive impact on market value of firm, furthermore, the younger and smaller companies in high tech markets have more ability to convert the R&D investment into market value.

From industry level, the R&D investment participate in market value creation in manufacturing companies more than service companies in US market owing to the nature of material products and hence the customer's perspective on its characteristics and the value it provides (IKE & KINGSLEY, 2010).

Finally, there is agreement among most of the results of the scientific literature on empirical evidence of R&D ability to create and improve market value. Also, considering it the channel that leads to the formation of intangible assets, which in turn contributes to improving and stabilizing cash flows.

### **2.5.1.3. The role of brand**

*"Roberto Goizueta, the former CEO of The Coca-Cola Company, answered a question in 1997: what would happen if tomorrow we woke up and every single asset that Coke has was wiped out. I could walk into any bank and borrow the money to restart operations, just based on the strength of the Coke brand name."* (HIMME & FISCHER, 2014).

AMERICAN MARKETING ASSOCIATION (2015) has definite the brand as *"Name, term, design, symbol, or any other feature that identifies one seller's good or service as distinct from those of other sellers"*. The value of the brand has a crucial impact on consumer behaviour towards the company's products (KELLER, 2003). In other words, the function and art of branding is a major contributor to the success of a product or service sold by the company that markets it, so, brand management should aim to build into customers' minds a set of perceptions and attitudes relating to an offering, leading to positive buying behaviour and thus provides protection against price competition (KOTLER & ARMSTRONG, 2013).

On the other hand, brand equity refers to the financial value which created from customer reaction to the brand marketing, it involves a three concept: a group of intellectual associations, higher price compared to rivals, and share price premium (ANDERSON, 2011), generally, costumer deals with the brand equity via two ingredients: first is the brand strength that establishes the brand linkages kept by customers, second is the brand value that presents the resulted revenues from brand strength to get superior earnings in both recently and futurity aspects, as a result, the majority of the price paid in deals to buy companies or operating units like mergers and acquisitions back to brand equity (LASSAR et al, 1995). Correspondingly, brand equity is reflected in the market value of companies possess the intellectual rights of the brand (WILLMOTT, 2010).

According to BRAND FINANCE CONSULTANCY FIRM (2018), the top valuable brands reached unprecedented levels in the annual report on the world's most valuable brands as in table 4 below:

**Table 4. The 10 Most Valuable Brands in 2018**

Rank	Brand name	Brand value (USD b)	Chang %	Country
1	Amazon	150.8	42%	united states
2	Apple	146.3	37%	united states
3	Google	120.9	10%	united states
4	Samsung	92.3	39%	south Korea
5	Facebook	89.7	45%	united states
6	AT&T	82.4	-5%	united states
7	Microsoft	81.2	6%	united states
8	Verizon	62.8	-5%	united states
9	Walmart	61.5	-1%	united states
10	ICBC	59.2	24%	China

Source: BRAND FINANCE (2018)

The valuation of brand equity has become one of the most important issues in both marketing and finance research due to the strategic function of brand value by ensuring the efficient allocation of resources to maximize the value, particularly by directing marketing spending towards the optimal brand portfolio (ABRATT & BICK, 2003), the brand value basically depends on three aspects according to HUANG (2015), the first related to brand as intangible asset and its value represents the financial added value, as well as the future cash flows can be gained by firm investment in brand. Secondly, brand value can be produced by customer loyalty, trust, and relationship, as long as the customer wants to buy the brand, its value will be greater. The third aspect dell with brand value as a combination of both a financial asset and customer value to provide a more inclusive approach.

Many approaches and models have been developed in the brand equity valuation arena, which include quantitative and qualitative models also divided into five main groups according to ABRATT & BICK (2003):

- 1) cost-based approaches: that deal with all marketing costs capitalization, launching a new brand replacement cost
- 2) market-based approaches: that focuses on primum price of firm brand comparing with other available brands in the market or through capital market valuation of intangible assets.

- 3) economic or income-based approaches: these approaches deal with trademark using payment, and calculated brand value depending on some economic performance ratios such as ROA and economic value added.
- 4) formulary approaches: that used by consultancy companies such as Brand Finance, Interbrand, Millward Brown and Forbes that issue periodical rankings of firms' brand value around the world.

We need to note that there are many models that combine two or more approaches. As a result, it is possible to enumerate more than 40 models to evaluate brand equity (BULGARELLI, 2015). Further, brand equity is the origin of added value in the product market as the main channel of customer loyalty and awareness about product brand criteria and expected utility which parallel to target of marketing strategies to gain a market share and hence a superior performance in the market (OLIVEIRA et al, 2018).

From the financial performance side, a stream of research addressed the brand equity role in performance, CHANG et al (2018) using sample involves 166 B2B Chinese companies, find that brand orientation enhances performance by promotion customer value creation. SILVA et al (2017), depending on the resource-based view, showed that the Spanish hotels with brand achieve a higher level of profits and correlated with the brand value from the clients' point view, and the impact will be stronger when combined with corporate governance practices. Also, in the framework of resource-based theory, WANG & SENGUPTA (2016) founded that the brand equity plays the role of moderating in the stockholders- performance relationship by studying the data of 81 companies of the international top100 valuable brands. Continuously, brand equity decreases the financial stresses and increases the company's debt ability as well as diminishes the risk by cash flows volatility drooping (LARKIN, 2013). In the same track, demand for products increases and therefore cash flows (SALINAS, 2009), cost of equity (REGO et al, 2011). Some researchers studied the impact of the brand on other financial metrics such as capital structure (CHEN & ZHANG, 2013). Virtually, brand equity leads to sustainable performance by (1) cognitive psychology which hypothesises that the customers 'preferences and behaviour can be superseded when they are acknowledged correctly about product information and features. (2) the signalling impact of brand equity which focus on the customer ability to absorb the deployed brand ingredients to distinguish the company brand comparing to rivals' products (WANG & JIANG, 2019).

In the context of capital market performance, the brand value represents about 20% of the S&P 500 market capitalization (OCEAN TOMO, 2019), Scholars asserted the significant link between brand and firm value (AEKER, 1991; 1996). BELO et al (2014) analyzed the relationship between

brand capital and shares' returns in US-listed companies for period from 1975 to 2010, the results showed that companies with high brand capital investment have higher mean of returns than companies with less brand capital investment, also companies with greater brand investment per employee gain higher returns. More than that, the capital market reacts with brand name, Kashmiri & MAHAJAN (2015) studied a sample of 180 companies with change name disclosures, they concluded that companies with high marketing activities gain additional value in the market as a result to change their brands' names, additionally, companies that had changed brand names to take advantage of adding strong brand name to their product portfolio get higher returns than companies changed brand names to adapt their dimensions activities.

In the same way, brand equity affects positively on the market value of the listed company and negatively on associated risks in the market, on other words, branding actions have a long-term impact on performance by competitive advantage creation which in turn maximize the shareholders' value (CRASS et al, 2019). Table 5 includes some related studies of the relationship between brand equity and capital market metrics practically market value and risk

**Table 5. Some related studies of the brand impact on capital market**

AUTHOR(S)	Capital market metrics			
	Market value	Affect	Risk	Affect
BARTH et al (1998)	yes	+	yes	-
AAKER & JACOBSON (2001)	yes	+	yes	-
MADDEN et al (2006)	yes	+	yes	-
MIZIK & JACOBSON (2008)	yes	+	yes	-
BHARADWAJ et al (2011)	yes	+	yes	-
JOHANSSON et al (2012)	yes	+	yes	-
HIMME & FISCHER (2014)	yes	+		
MIZIK (2014)	yes	+	yes	-
OLIVEIRA et al (2018)	yes	+	Yes	-
BANK et al (2019)	yes	+	Yes	-

Source: modified depending on HIMME & FISCHER (2014)

The table shows that most researchers have examined the relationship between the brand as a marketing variable on the one hand and both market value and risk as variables related to the company's performance in the capital market on the other hand, the main result of these studies is stronger brand means higher return and lower relative risk in capital market since brand equity is

the main consequence of all marketing decisions and presents the largest intangible assets and therefore the largest portion of investment when it is translated to financial figures.

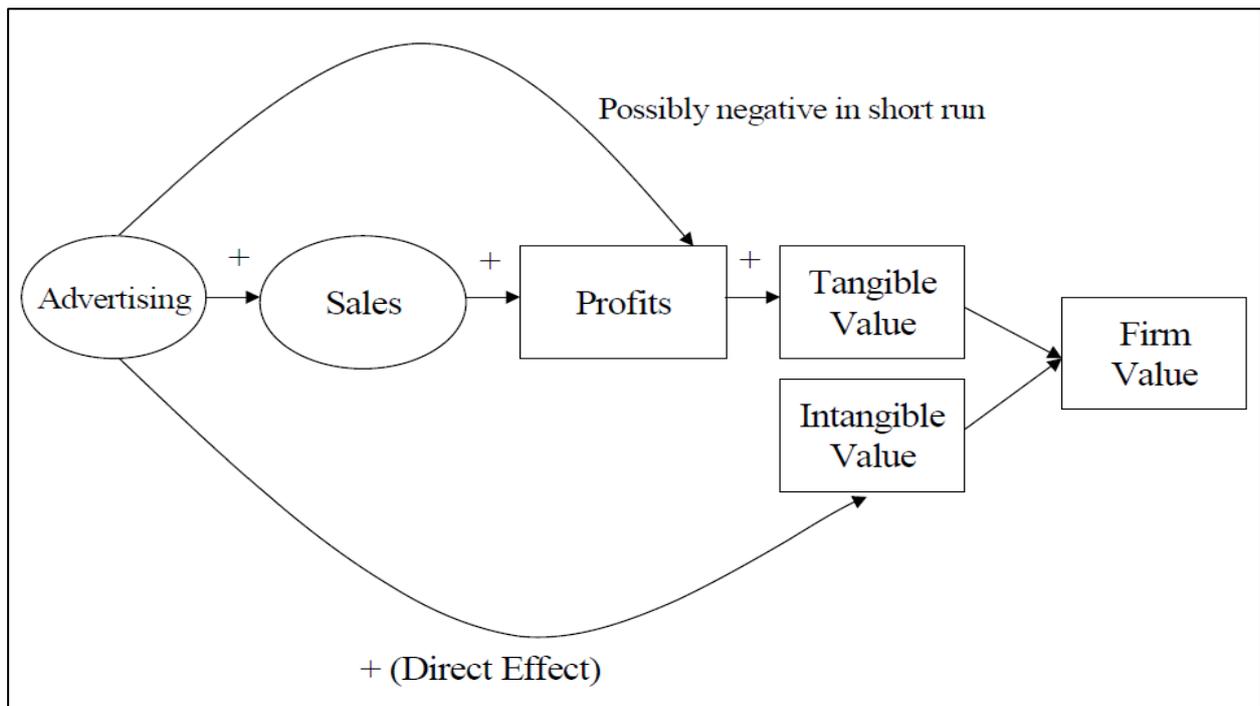
Sum it up, the brand as an intangible marketing asset contributes substantially to create value for company stockholders and potential investors, meaning that the competitive advantage that created by the brand in the product market could be extended to capital market and characterised some stocks as a branded.

## **2.5.2. Marketing actions and firm value**

Marketing actions refer to the tools used by decision-makers to achieve the traditional marketing objectives in relation to customers and market share as well as financial goals in terms of maximizing the value of the company, they are presented by marketing mix strategies. In this section the focus will be on the most important marketing elements which their role has been tested on the company's performance and value within the previous literature practically advertising as the most element of marketing communication, a new product introducing within the product strategy and marketing expenditure which measures the direct investment cost of marketing strategies implementation.

### **2.5.2.1. The role of advertising**

A large body of research has addressed the impact of advertising as a marketing action on performance and in the firm valuation in the financial market because of the advertising is the perceptible part of marketing along with it is clear and visible to the audience. In addition to that most of advertising spending information of listed companies are available in popular databases (ZINKHAN & VERBRUGGE, 2000). furthermore, advertising expenditure accounts for about 5% of GDP in the USA (ARKOLAKIS, 2010). From the market-based assets context, advertising applications generate brand equity which in turn improves performance in several ways such as: boots products differentiation, rises price premium and ensures a good response to new products (MCALISTER et al, 2007). JOSHI & HANSSENS (2010) showed that the indirect impact of advertising is through sales which increases the profit and then the tangible assets, on other words, through the common financial indicators of performance which in turn affect the firm value, while the direct impact is through the intangible marketing assets which reflected directly into the firm value as in Figure 7 below.



**Figure 7. The effects of advertising on firm value**

Source: JOSHI & HANSSENS, 2010

The relationship of advertising with the value of the company was addressed from several angles regarding the nature of the relationship and the type of financial variable that expresses the value in the market.

A few studies elaborated the relationship between advertising and firm risk. SINGH et al (2005) studied the linkage between advertising spending and systematic risk for period 1998-2001 by using the best-performing companies in Stern–Stewart database, they concluded that the increase in advertising spending leads to less systematic risk and higher financial health measured by Altman's Z-score ratio. In the same way, starting from the fact that *B* is the best metric of systematic risk as well as it is reflected in the stock price, MCALISTER et al (2007), by using sample contents of 644 companies for the period between 1997 and 2001 (60 months) they found that the lower level of systematic risk correlate to higher advertising to sells ratio and R&D to sells ratio after controlling for some financial variables. Alike, the advertising associated with systematic risk negatively in a long with higher return on share, while advertising spending through pharmaceutical direct-to-consumer advertising (DTCA) leads to increasing in idiosyncratic risk level that requires a good portfolio diversification by the investor (OSINGA et al, 2011).

In the context of the relationship with cost of capital, HUNG & WEI (2012) clarified that the implied cost of capital is one of the optimal performance measures in capital market due to its correlation with expected cash flows, their findings showed that the advertising intensity measured

by natural logarithm of advertising spending to total assets ratio, drives to low degree of implied cost of capital depends on overall sample for period from 1975 to 2001. likewise, GRULLON et al (2004) displayed that companies with higher advertising expenditure have a greater dispersal of ownership in terms of shareholders' number as well as higher liquidity levels as a result of investor familiarity with a company which produces less cost of capital.

Correspondingly, financial analysts play an intermediate role in value creation by advertising presented by return, where the analysts help investors by providing them with outputs of analyzed information (including advertising) and thereby reducing the "information asymmetry between product and financial markets" (LUO & JONG, 2012).

From the signal theory view, advertising provides a clear goodness signal of the company and allows customers to price its products properly and at the same time acknowledges investors about the right value of shares, on other words, advertising communication could be an information resource to support investment decisions (CHEMMANUR & YAN, 2009).

Finally, advertising may stimulate the investor's bias since advertising promotes awareness about the company, so the investors choose stocks with higher advertising appearing (FRIEDER & SUBRAHMANYAM, 2005). Moreover, by advertising applications, companies communicate implicitly to their investors, thus it is possible that they can modify the mood and subsequently the behaviour of investor by advertising, for example, the trading volume and returns increase on following Monday of football game for companies advertised during the game (FEHLE et al, 2005). Therefore, advertising is not only a marketing action but a sufficient channel of information flow to both capital market and product market, it plays a significant role in increasing or maintenance sales revenue on the one hand and in attracting investor attention about the listed company on the other hand.

#### **2.5.2.2. The role of a new product**

The concept of the product expresses the characteristics of the company product or service and its ability to satisfy the desires of customers and thus raise the level of sales and revenue, so it is the starting point for other marketing activities, not to mention that it is the common channel to achieve the interests of each of the company in cash flows and in achieving customer satisfaction. knowing that the product is not limited to tangible goods and services, but extends to ideas, people, places and organizations (KOTLER & ARMSTRONG, 2008).

The process of introducing the new product to the market is the first phase in product life cycle carries with it many risks to the company's performance and results. The success of the new

product as part of the innovative approach gives a greater degree of flexibility for the company in applying other marketing strategies to reap its fruits in the long term (SINGH, 2012). Simultaneously, likelihood of new product failure up to 60% as well as the revenues resulting may not be economically feasible due to significant development costs and the risks of imitation by competitors (OGAWA & PILLER, 2006). Further, a new product introducing is a major outcome of innovation adoption approach by monitoring and transferring market feedback into actionable inputs to develop the current product or interduce a new one in the light of continuous customer needs meeting which insure a stable revenue of firm (PRIFTI & ALIMEHMETI, 2017).

In financial market, the first research on the role of a new product introduction focused on the short-term impact of a few days on stock returns after the introduction event (CHANEY et al, 1991). However, the robust correlation between product strategy and brand building as a pivotal marketing asset has drawn attention to researching the relationship of the product as a marketing variable with firm value in the long term. PAUWELS et al (2004) demonstrate that the new product introduction improve the short term firm outputs presented by top- line revenues and bottom-line profit in addition to long term performance measured by firm value as a result to investor reaction to a new available information which intensify over time, on other words, reemphasizing the informative content of marketing actions through investor expectations about resulting future cash flow of successful new product introduction and vice versa.

A new product introduction process embeds three main parts. pace indicates the speed of process; irregularity indicates the tenacity trend and scope indicates the degree of spread of the product on the market, in this context, SHARMA et al (2018) found that pace and scope have an inverted-U impact on firm value while irregularity has a negative impact on firm value in pharmaceutical industry.

In regards on the innovation strategy in production, KOSKI & KRETSCHMER (2010) refers to that a new innovative product explains and motivates the firm value growth through TQ ratio more than imitative products that lead to lower level of value growth in mobile handset industry.

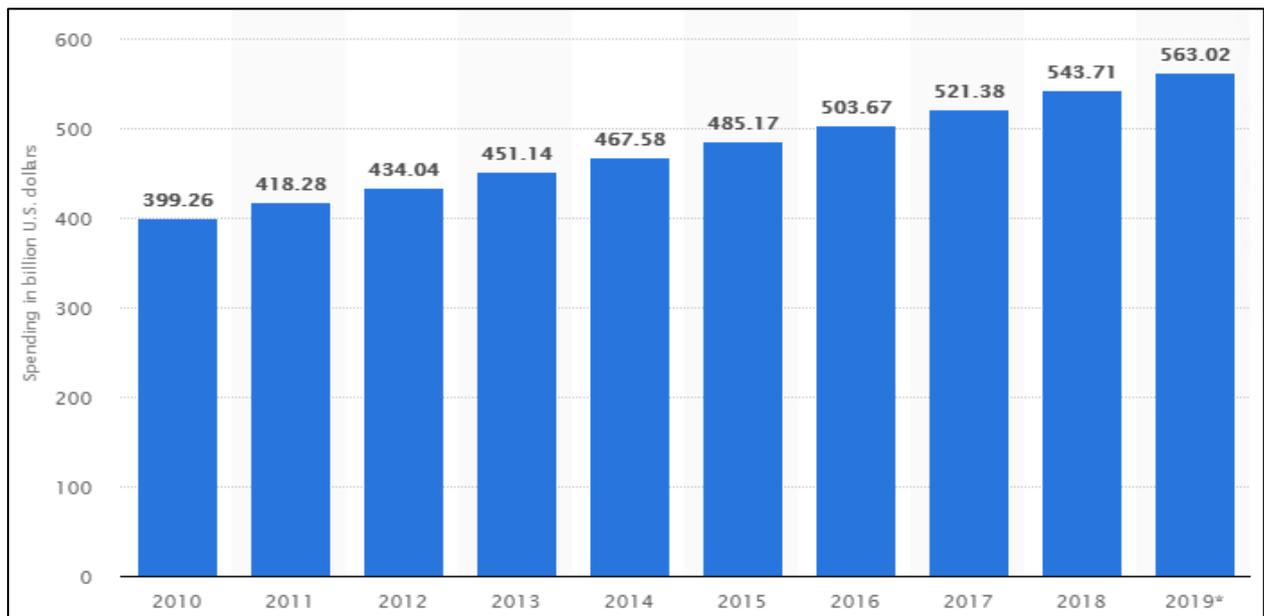
Further, media and analytical coverage of the new product motivates the interest of the investment community in the company and thus the attractiveness of its traded shares, MANN & BABBAR (2018) concludes that a new product announcement leads to significant abnormal return, as announcing the characteristics of the new product would attract the attention of investors, especially with the intermediary role of the official spokesperson.

Consequently, the new product of company could be the significant signal about the company position in its market and thus the customer decision on the one hand and this signal affects the investor' view in the capital market on the other hand.

### **2.5.2.3. The role of marketing expenditure**

Marketing is a costly activity and involves spending dollars to implement strategies and achieve goals. Marketing related costs involve costs of transferring production to the customer, storage, advertising and distribution (DAWAR, 2013). SHETH AND SISODIA (1995) analyzed the trend of corporate cost for 50 years from 1945 to 1995, their results appeared that all elements belonged to manufacturing costs have dropped from 30% to 50% as a percentage of total corporate costs as a result to adopt a new technological application in production operations such as "just-in-time system", as well as the administrative costs contribution have dropped from 30% to 20%. While the trend of marketing costs was reversed, rising from 20% to 50% of total costs in five decades, figure 8 demonstrates the growth in marketing spending during the last 10 years globally. Moreover, the customers' motivations to watch and focus on marketing information issued by companies has declined which leads to sharply increasing of the cost of attracting the attention of customers by nine times in the last 20 years (TEIXEIRA, 2014). Further, marketing budget average equal to 11.2% of revenue globally ranges between 22% in the retail sector and 2.6% in health and pharma (STATISTA, 2020). So, in the light of previous statistics, marketing now faces a lot of challenges to prove that its actions contribute directly to increasing the value of company and achieving shareholder goals, in a way that justifies the marketing costs that are allocated to the implementation of marketing strategies (WEBER, 2002). As a result, marketing investment correlates to financial firm performance through nonfinancial measurements on the light of marketing-accounting integrity (KOSAN, 2014). For example, in the automotive industry, the marketing spending plays an important role in sales level increasing particularly when different marketing strategies had been adopted depending on geographical parts (TUDOSE & ALEXA, 2017).

Globally, marketing spending has grown steadily over the past decade, transforming it into one of the most important elements of investment spending, as shown in figure 8, where spending grew by nearly 41% between 2010 and 2019. Basically, the growing trend of marketing expenditure indicates that it has become an integral part of business financial budget and strategic plan as an investment expenditure not as a pure cost.



**Figure 8. Global marketing spending trend in the last 10 years**

Source: STATISTA (2020)

CHEN et al (2016) found that the operating profit is affected by marketing expenditure, and this effect varies depending on industry of the firm as well as to the intensity of investment by using the data of Taiwanese listed companies.

From the resource-based view and social capital theory, CHENG et al (2018) examined the impact of marketing expenditure on long-term firm performance measured by Tobin's Q ratio and market share with moderating role of political connections represented by guanxi-related perks, by applying a sample of 2317 Chinese listed companies for period from 2010 to 2013, the results showed that the marketing expenditure has a positive impact on firm value growth and guanxi-related perks costs enhanced the relationship between marketing expenditure and firm value according to Tobin's Q indicator.

On the other hand, the marketing budget can push the stock price higher and reduce the company's cash needs or working capital thus the value of the company (RAO & BHARADWAJN, 2008).

Meaning that, marketing investment leads to optimal marketing recourse allocation as a part of investment decisions and strategic orientation in the firm to keep a satisfied return level and reduce the risk of return fluctuation (OSINGA et al, 2011).

That is, marketing spending is not limited to the accounting representation of the amounts spent but extends to being one of the long-term investment inputs into the intangible marketing assets. Meaning that, the importance of marketing strategies in enhancing the value of the company has led to a fundamental change in the content of spending from cost to investment that is intrinsically linked to the new framework of business model and competition.

**2.6. Digital marketing and firm value**

Nowadays, digital business dominates a large percentage of business activities through a variety of tools and platforms, Statistics for 2019 indicate that 67% of the world's population or 5.11 billion people, use the mobile, 57% or 4.39 billion internet users, and 45% or 3.5 billion active social media users (WE ARE SOCIAL, 2020). Digitalization and its new idioms such as big data, artificial intelligence, and machine learning, has led to a fundamental shift in investment and operational decisions in companies regardless of their field, this new business model applies to marketing practices through the concept of digital marketing which involves integrating digital technology into marketing strategies to improve or maintain a competitive position (QUIGLEY & BURKE, 2013), digital marketing includes basically online communication through several channels like social networks, mobile applications, email marketing and website. Comparing to traditional marketing, digital marketing differs by several criteria such as interactivity with audience, cost, result measurement and accessibility level (YASMIN et al, 2015). Social media platforms present a new generation of digital marketing practices after the phase of search engines or covenantal matrices of online consumer behaviour as figure 9 shows:

	Digital Metrics	Visibility and Availability	Trustworthiness	Customer Engagement	Social Influence (contagious effect)
<b>Social Media</b>	Online Product Reviews	High	High	High	Very High
	Blogs	High	High	High	Very High
<b>Conventional Online Consumer Behavior Metrics</b>	Web Traffic	Low	Low (can be easily manipulated)	Low	Very low
	Internet Search	Medium	Low (can be easily manipulated)	Low	Very Low

**Figure 9. Comparison between social media and conventional channels of digital marketing**

Source: LUO et al (2013)

In general, digital marketing provides a lot of advantages for brand management for example, it contributes to structure a nice brand image due to the wide scope and continual updates, also digital platform allows a long-term relationship between clients and company’s brand through interactivity feature that provides the outputs of user’s experience valuation (PIÑEIRO & MARTÍNEZ, 2016). Additionally, digital marketing can lead to less costs in some fields such as customer service, communication which contributes to profit margin enhancement and simultaneously provide an opportunity to use an achieved spending saving on other activities (STRAUSS & FROST, 2014).

Based on marketing assets perspective, digital marketing channels and specially a social media content enhances the efficiency of the brand investment for greater financial outputs, where the awareness of company brand increases considering that social media is the reliable source of customer decision to choose or delete a specific brand (KING et al, 2014).

As in traditional marketing, digital marketing aims to improve the company's performance and thereby maximize its value. From marketing performance point of view, digital marketing increases the degree of customer acquisition and customer retention as well (BRODIE et al,2007), in the same logic customer prefers the brand which has trusty website information (LODA et al, 2009), further, digital customer experience could be considered as one of the most important resource of superior performance (KLAUS, 2014).

From firm value perspective, investors are interested in many points about digitizing the company's activities such as: social media presence, the consistency and frequently of digital marketing, Attractiveness and modernity of website, the online reviewing of users, frequency of Google ads using, and newsletter sending frequency (FUNERAL BUSINESS, 2020).

The market rewards companies that convert digitally by significantly increasing returns after adopting digital activities (CHEN & SRINIVASAN, 2020). Starting from the role of social networks in brand popularity augmentation when the customers talk about the product, KIRK (2012) pointed out that social networks' expenditure, as a part of firm budget, associates positively with firm value in the business – customer companies. Furthermore, more effectiveness of information flow at social networks or depth of social media engagement measured by tweets frequency has positive impact on firm value (UYAR et al, 2018). Regarding conventional digital channels and in the light of comparison between search engine and social media, LUO et al (2013) concluded that Google search and web traffic have significant impact of return and risk in the capital market, but this impact is weaker than social media impact.

From a regulatory point of view, reporting of financial results over the social network has become at the heart of best practices for disclosure and it is common to use it as a significant indicator of firm transparency (ALEXANDER & GENTRY, 2014).

In the same context, the market responses to the weekly size of online communication and chatter about specific company as the measure of performance level in product market by share return change (MCALISTER et al, 2012). The same results have been reached regarding customer social media sentiment, where the customers' comments at social media networks significantly affect the abnormal return in the market (TAMRAKAR et al, 2018). On the other hand, social media

communication alleviates the negative market response toward the bad events like product recalling due to the ability of social media networks to provide regular and quick updates to wide range of stakeholders (LEE et al, 2015).

That is, digital marketing is the new gateway for adapting modern technical waves into the essence of marketing through dealing with the digital environment for customers to improve performance and increase the efficiency of marketing assets investment to achieve the goals of stakeholders, especially investors, in the sense that digital capabilities due to the high degree of interaction by investors, are the new engines to create the value in the company. Furthermore, continuous updates in these technologies add a new dimension to the competition, which is reflected in the company's ability to adopt the technologies to create sustainable value.

## **2.7. Evaluation of related literature**

As concluded from the literature review related to marketing factors and firm value parameters, the earlier research has been conducted as a response to the shift in the marketing concept and its growing financial role in the company in the framework of marketing-finance interface and under resource-based theory and market-based assets theory as an umbrella includes all possible channels of product and capital market interaction. Basically, all studies confirmed the positive impact of marketing on firm value indicators whether in the aspect of marketing assets or marketing actions. However, some critical notes can be made in the context of the content and the methodology used in the relevant literature as follows:

First, every study is focusing mainly on one marketing variable regardless of other marketing elements as a parts of integrated marketing system.

Second, advertising captures the largest share of research interest and has often been used as a synonym for marketing investment to the detriment of other marketing strategies despite its importance and role in creating value for the company. The same applies to the brand on the marketing assets side that have received great interest from researchers compared to other marketing assets as well as most of brand research depend on a comparison methodology between the companies with the highest rated brands with the rest of the companies in the market or sector which requires the availability of evaluation data from specialized agencies that are not present in all regions or markets.

Third, except for China, most of the relevant studies were conducted in developed markets, where the necessary data are available to measure the relationship between marketing practices and value indicators, which is difficult to meet in emerging markets considering sufficient data lack.

Fourth, few studies have used moderate variables within the relationship between marketing variables and value variables, meaning that the direct effect of marketing elements on value has often been addressed in isolation from other factors related to the internal or external environment of business, which can enhance the role of marketing in creating value and hence the explanatory power of relationship.

Fifth, the vast majority of studies have employed simple firm capitalization value or the Capital Asset Pricing Model CAPM as a proxy to measure the return and risk based on the assumption of market efficiency without addressing other valuation models that can give results that are not less than CAPM results in terms of reliability level.

Table. 6 below involves the summary of the most important studies in relation to used variables and context of marketing impact on firm value

**Table 6. Summary of some related studies evaluation**

Marketing Assets Impact				
	Studies examples	Methodology of firm value variable	context	Moderator variables
<b>Customer Equity</b>	KUMAR & SHAH (2009)	Firm capitalization	Developed – USA	
	LUO et al (2010)	CAPM	Developed – USA	Stock analysts' recommendations
	ZHANG (2016)	Firm capitalization	Developed – USA	
<b>R &amp; D</b>	IKE & KINGSLEY (2010)	Firm capitalization	Developed- USA	Industry-manufacturing & services
	DUQI & TORLUCCIO (2011)	CAPM	Developed – European markets	
	GUPTA et al (2017)	Firm capitalization	Developed and developing countries	
<b>Brand</b>	BHARADWAJ et al (2011)	CAPM	Developed – USA	Industry concentration

	JOHANSSON et al (2012)	CAPM	Developed – USA	
	OLIVEIRA et al (2018)	CAPM	Five emerging markets in Latin America	
	WANG & JIANG (2019)	CAPM	Emerging Market – China	Financial analysts' recommendations
<b>Marketing Actions Impact</b>				
	<b>Studies examples</b>	<b>Methodology of firm value variable</b>	<b>context</b>	<b>Moderator variables</b>
<b>Advertising</b>	MCALISTER et al (2007)	CAPM	Developed – USA	
	HUNG & WEI (2012)	implied cost of capital	Developed – USA	
	LUO& JONG (2012)	CAPM	Developed – USA	Financial analysts' recommendations
	ANGULO et al (2017)	CAPM	Developed – USA	Growth of profit & Growth of assets
<b>New Product</b>	KOSKI, & KRETSCHMER (2010)	Firm capitalization	Group of developed countries	
	MANN & BABBAR (2018)	CAPM	Emerging Market – India	The role of spokesperson
	SHARMA et al (2018)	CAPM	Developed – USA	Product complexity

Source: Own construction based on literature

As stated above, current study is focused on the impact of marketing on firm value in the context of Arab emerging markets. The novelty of the study is coming from:

- The marketing investment value has been used as a comprehensive measurement to present the marketing variables which take in account all marketing efforts.
- The methodology used in firm value valuation based on Ohlson model allows the inclusion of a wide range of financial and non-financial factors to give a more efficient measure of the market firm value.
- The moderator variables used as a proxy of good governance practices adds a new dimension to the model in terms of organizational relationships and decision-making mechanism to enhance the financial output of marketing, which would give a more comprehensive character to the proposed model
- The study of the relationship between marketing and market value in emerging Arab markets provides new empirical evidence on emerging market response to marketing variables despite the research limitations of these markets' environment.

## **2.8. General outlook of Arab emerging markets**

In this chapter, the main concepts of emerging markets will be presented from the economic context and from financial market point of view in addition to the marketing side, with a focusing on emerging Arab markets by displaying the important performance indicators of capital market and compare them with other emerging markets indicators to provide a big picture about capital market criteria in this region.

### **2.8.1. Emerging markets**

Inherently, countries are classified economically into developed and developing countries, in addition to emerging economies as a middle classification between them, so they are the economies which share some characteristics with developed economies or they are still in transition stage between the less developed and developed groups, it includes a large group of countries belonging to different geographical regions, globally constitutes 60% of the population and 45% of GDP, it is categorized based on some economic and political criteria by specialized international organizations such as income level, growth rate and risk level (MODY, 2004). Emerging Markets EMs characteristics can be summarized in three main aspects: firstly, physical characteristics regarding the adequacy of the business infrastructure. Second, socio-political characteristics, particularly the level of political instability and deficiencies in the legal framework, and finally, economic characteristics that focus on the low-income level, exchange market regulation and state management of the transition to a market economy (MILLER, 1998)

These specifications are also applicable to the emerging financial markets, according to International Finance Corporation IFC financial emerging market must lunched in country classified as a developing based on World Bank standards, a significant contribution of the financial market to the national financial system which measured by capitalization ratio as well as has a significant liquidity ratio. Historically, economic reform programs have accompanied the induction and development of stock markets in emerging countries, to contribute directly to expanding and improving private sector activities and attracting foreign investment. Likewise, during their life cycle capital markets go through four stages in emerging economies as in table 7 as a standard to category markets in these economies based on listed companies' number, capitalization value of market, liquidity level of market, return volatility, regulation soundness, the level of contribution to economy, and foreigner investors interest (KHAMBATA, 2000).

**Table 7. Emerging capital market phases**

	Early phase	Second phase	Third phase	Fourth phase
Companies number	Few	More companies	Large	Large
Capitalization	Small	Small	Large	Huge
Liquidity	low	low	High	High
Volatility	High	High	More stable	stable
Regulation	Rudimentary	More developed	Sophisticated	Sophisticated
Economic contribution	No	Very limited	Significant	Major
Foreigner investors interest	No	Limited	High	High

Source: modified depending on KHAMBATA (2000)

There are several indexes which include financial emerging markets, and each market is represented by a number of companies according to weight whether at the world level or at the level of a specific region such as MSCI indexes, FTSE indexes, S&P indexes. Based on MSCI, the country classification and weight in the index have been reviewed regularly depending on economic development level degree, market size and liquidity, and accessibility level for foreigner investors (MSCI, 2019), as well as FTSE classification takes into account the goodness of regulation procedures, the size of country, market stability and market access for international investors (FTSE, 2018).

From a marketing perspective, marketing strategies in these markets differ from those in developed markets consistent with the low income, unstable infrastructure and the distinguished exchange between labour and capital so the products must be designed with functional considerations (DAWAR & CHATTOPADHYAY, 2000). In relation to marketing theory implications, some points should be considered in emerging markets: the customers are more price sensitivity, the information are more costly, high variance among market segments, high level of competition and brand investment horizons (ROBERTS et al, 2015). In the same manner, SHETH (2011) asserts that marketing focusing should be conveyed from distinguishable advantage to market accumulation and standardization as well as the market developing strategy adopted rather than market orientation as a result of market heterogeneity, socio-political influence, unrestricted competition, deep-seated resources deficiency and unqualified infrastructure. In the light of huge market in term of population and therefore the size of the demand, a framework was proposed by BANG et al (2016) to adopt appropriate marketing strategies in emerging markets based on the behavioural classification of the current and potential user (non-customer), where a distinction can be made between the market upgradation strategy that targets above average users and volume expansion strategy targets below average users.

So, the distinctive nature of emerging markets provides a wealthy approach to studying the different economic elements and to showing the extent of the difference with developed markets within the financial market framework and its interaction with other economic field variables such as marketing that are concerned with the interconnection between investor and consumer behaviour.

**2.8.2. Arabic emerging markets**

The Arab region includes 22 Arabic speakers’ countries, it covers the geographical territory extending from the Atlantic Ocean in the west to the Arabian Gulf in the east (PHILLIPS, 2012). With an area of approximately 13 million cubic meters and a population of approximately 406 million people in 2019 (UN DESA, 2019). According to the World Bank, Arabic countries are divided into the four categories depending on the level of income lower, lower middle, upper middle and high income, in regard to financial market, the Arabic markets are classified in frontier and emerging markets groups in both classification of FTSE and MSIC as presented in table 8:

**Table 8. Arabic countries classifications**

Resource	Classification group	Countries
World Bank	Lower income	Somalia, Syria, Yemen
	Lower middle income	Comoros, Egypt, Morocco, Mauritania, Sudan, Tunisia, Palestine
	Upper middle income	Algeria, Iraq, Jordan, Lebanon, Libya
	High income	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE
FTSE	Frontier	Bahrain, Jordan, Morocco, Oman, Palestine, Tunisia
	Secondary emerging	Egypt, Kuwait, Qatar, Saudi Arabia, UAE
	Advanced emerging	No
	Developed	No
	Not classified	Algeria, Iraq, Lebanon, Libya, Syria
MSCI	Frontier	Bahrain, Jordan, Lebanon, Morocco, Oman, Tunisia
	Emerging	Egypt, Kuwait, Qatar, Saudi Arabia, UAE
	Developed	No
	Not classified	Algeria, Iraq, Libya, Palestine, Syria

Source: Own composition based on the data from WB, FTSE and MSCI (2019)

It is noted that most Arab countries have levels of income around the middle level with the exception of the oil-producing Gulf states that fall into the category of high-income countries, which is directly related to the classification of financial markets, where 4 Gulf countries out of 6 came in the category of developing markets, knowing that the promotion of these markets began in 2014 after the requirements were met. In general, most Arab financial markets are still in the Frontier category as a first step to develop market activities and organized structures to move forward to the next stage.

The Arab markets have witnessed qualitative leaps during the past three decades with regard to establishing and regulating, as well as with the contribution to development and investments financing. on the whole, they can be classified into three groups, firstly, the markets of oil states with financial surpluses and relative economic stability, secondly, markets in countries that pursue economic liberalization policies with economic deficits fluctuations such as Egypt, Jordan, Morocco, Lebanon and Tunisia, and finally countries that still rely mainly on the public sector and in the stage of expanding the role of the private sector such as Iraq, Algeria, Libya and Syria.

**Table 9. Number of listed companies on Arab markets**

Market	lunching	2011	2012	2013	2014	2015	2016	2017	2018	2019
ABU DHABI SECURITIES MARKET	2000	67	66	66	65	68	68	67	70	69
Algeria Stocks Exchange	1997	2	2	2	2	2	2	2	2	2
AMMAN STOCK EXCHANGE	1978	247	243	240	236	228	224	194	196	193
BAHRAIN STOCK EXCHANGE	1989	49	47	47	47	46	44	43	43	44
BEIRUT STOCK EXCHANGE	1920	25	26	28	30	30	30	30	30	30
CASABLANCA STOCK EXCHANGE	1929	76	77	75	75	75	75	74	75	75
DAMASCUS SECURITIES EXCHANGE	2009	22	22	22	23	24	24	24	24	24
DOHA SECURITIES MARKET	1997	42	42	42	42	42	42	42	42	42
DUBAI FINANCIAL MARKET	2000	62	57	55	58	59	61	65	67	67
EGYPT CAPITAL MARKET	1903	214	213	212	215	222	222	257	256	252

Market	lunching	2011	2012	2013	2014	2015	2016	2017	2018	2019
KHARTOUM STOCK EXCHANGE	1994	56	57	59	58	58	67	67	66	67
KUWAIT STOCK MARKET	1962	214	219	210	216	216	216	216	216	216
MUSCAT SECURITIES MARKET	1998	130	130	131	131	131	131	131	130	130
PALESTINE SECURITIES EXCHANGE	1997	46	48	49	49	49	49	48	48	48
SAUDI STOCK MARKET	2007	150	158	161	166	172	176	188	198	202
TUNIS STOCK EXCHANGE	1969	57	59	65	81	78	79	81	81	81
<b>Total</b>		<b>1459</b>	<b>1466</b>	<b>1464</b>	<b>1494</b>	<b>1500</b>	<b>1510</b>	<b>1529</b>	<b>1544</b>	<b>1542</b>

Source: Own composition based on the data from Arab Monetary Fund

Table 9 shows that most of Arab markets had been established or restructured during the last decade of the twentieth century, so they are relatively modern markets. The number of listed companies is relatively constant, with slight increases in some markets over the past ten years. On the other hand, the number of listed companies is less than 100 in most markets (11 markets), and between 100 and 200 in three markets, while there are more than 200 listed companies in only two markets, which indicates low market depth and limited investment options.

With respect to market value, there are slight changes during the five years represented in Table 10, where the aggregated market value of the markets decreased by 3% between 2014 and 2018, which indicates that there are no significant changes in either trading volumes or stock prices. On the other hand, in 2018, the market value ranges between \$ 1 billion in the Damascus Stock Exchange and \$ 506 billion in the Saudi market, knowing that the Saudi market is the only Arab market that is one of the large markets in terms of capital value and represents 40% of the total value in Arab region.

Regarding market liquidity measured by the turnover of traded shares to the market value, the Arab markets included in Table.11 are characterized by their relatively low liquidity with a downward trend between 2014 and 2018 where the overall average decreased from 68% to 28%, meaning the difficulty of converting investments into cash and thus the accompanying risks for investment, this may be due to the high concentration of ownership by the block shareholders and thus the low level of floating stocks.

**Table 10. Market capitalization of Arab markets-million USD**

Market	2014	2015	2016	2017	2018
ABU DHABI SECURITIES MARKET	133,964	129,719	112,516	124,516	137,524
AMMAN STOCK EXCHANGE	25,530	25,412	24,421	23,782	22,740
BAHRAIN STOCK EXCHANGE	21,058	17,466	17,367	18,227	21,747
BEIRUT STOCK EXCHANGE	17,635	17,761	18,547	18,484	16,905
CASABLANCA STOCK EXCHANGE	54,469	45,495	50,785	57,644	60,742
DAMASCUS SECURITIES EXCHANGE	775	607	794	1,264	1,312
DOHA SECURITIES MARKET	185,881	151,888	154,713	129,321	163,333
DUBAI FINANCIAL MARKET	87,864	83,912	92,213	107,563	93,348
EGYPT CAPITAL MARKET	69,913	57,255	59,250	40,599	42,072
KHARTOUM STOCK EXCHANGE	1,877	1,641	2,424	1,008	1,009
KUWAIT STOCK MARKET	100,365	81,572	87,711	92,747	96,269
MUSCAT SECURITIES MARKET	27,328	27,006	28,390	28,105	27,400
PALESTINE SECURITIES EXCHANGE	3,187	3,339	3,390	3,891	3,716
SAUDI STOCK MARKET	494,245	421,037	450,218	450,305	505,994
TUNIS STOCK EXCHANGE	9,284	8,825	9,357	10,765	9,165
<b>Total</b>	<b>1,233,375</b>	<b>1,072,935</b>	<b>1,112,096</b>	<b>1,108,221</b>	<b>1,203,276</b>

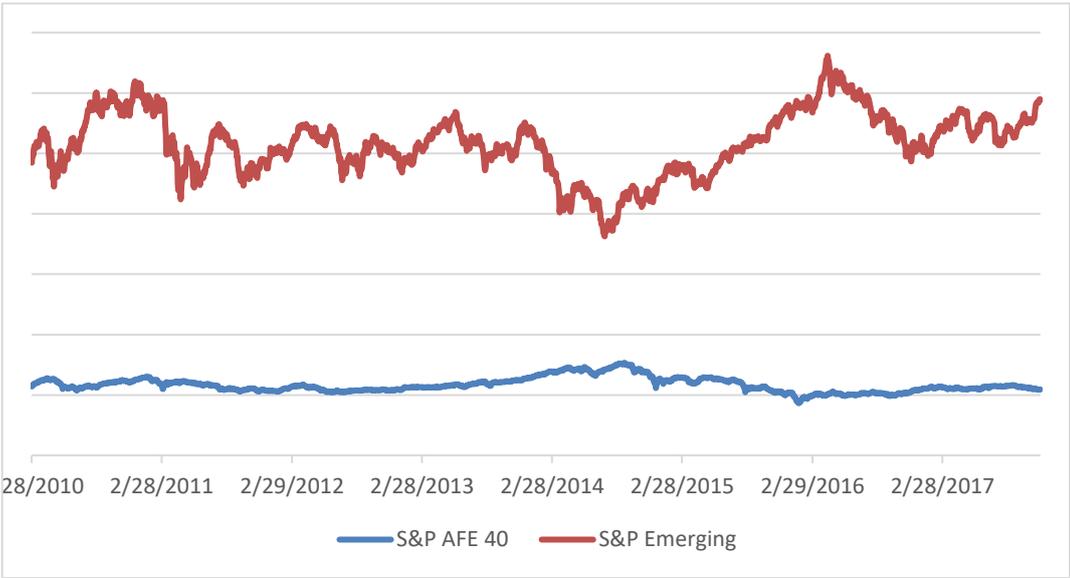
Source: Arab Monetary Fund and Arab Federation of Exchanges

**Table 11. liquidity rate of Arab markets**

Market	2014	2015	2016	2017	2018
ABU DHABI SECURITIES MARKET	35%	12%	11%	11%	8%
AMMAN STOCK EXCHANGE	13%	18%	13%	17%	14%
BAHRAIN STOCK EXCHANGE	3%	2%	2%	3%	4%
BEIRUT STOCK EXCHANGE	6%	3%	5%	7%	7%
CASABLANCA STOCK EXCHANGE	8%	12%	5%	10%	8%
DAMASCUS SECURITIES EXCHANGE	25%	1%	2%	2%	4%
DOHA SECURITIES MARKET	29%	17%	12%	14%	12%
DUBAI FINANCIAL MARKET	118%	49%	38%	29%	17%
EGYPT CAPITAL MARKET	40%	37%	39%	40%	44%
KHARTOUM STOCK EXCHANGE	23%	6%	3%	4%	3%
KUWAIT STOCK MARKET	20%	13%	14%	21%	15%
MUSCAT SECURITIES MARKET	15%	13%	16%	16%	10%
PALESTINE SECURITIES EXCHANGE	11%	10%	13%	12%	10%
SAUDI STOCK MARKET	118%	101%	63%	50%	47%
TUNIS STOCK EXCHANGE	10%	11%	13%	11%	10%
<b>Total</b>	<b>68%</b>	<b>50%</b>	<b>32%</b>	<b>30%</b>	<b>28%</b>

Source: Own composition based on the data from Arab Monetary Fund

Relatively, the performance of Arab capital markets could be measured by S&P AFE 40 index which includes the most liquidated and largest 40 listed companies in MENA (AFE, 2019), figure 10 shows that the index fluctuated within relatively narrow limits compared to S&P emerging markets index during the last ten years, this confirms the relative stability in stock prices as well as in trade volume. Generally, it reflects Arab markets nature and their economic features. In addition to their weak association with other emerging markets in the world.



**Figure 10. S&P AFE 40 and S&P Emerging**

Source: THOMSON REUTERS DATASTREAM

**2.8.3. Overview of Arab markets under study**

Four Arabic emerging markets had been selected, Qatar, Dubai, Abu Dhabi, and Kuwait, they are being classified in secondary emerging markets according to FTSE and share many characteristics such as market size, economy size, and economic structure.

In this session, Arab markets under study were highlighted, especially its establishment and the most important stages of its development. In addition to some performance indicators.

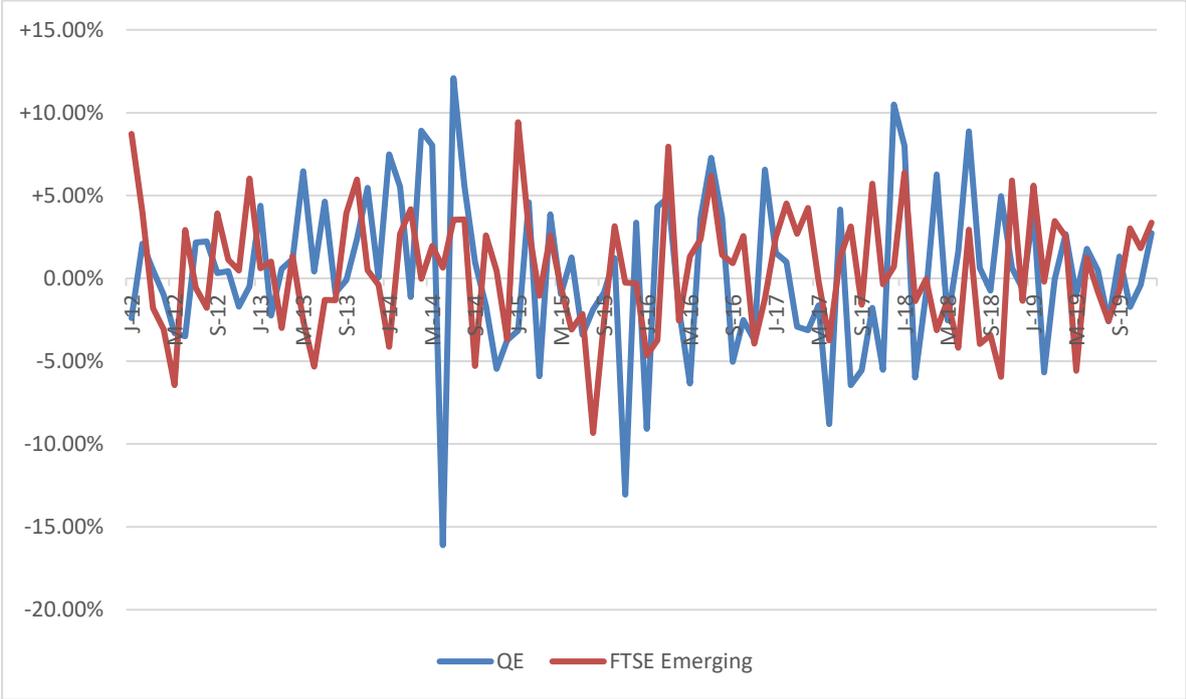
**2.8.3.1. Doha Securities Market**

The first law number 14 of financial market was issued in 1995, while the official trading started on May 1997 with 17 companies and market value at one billion USD. In 2005 the law was issued to allow foreign investors to own a maximum of 25% of the shares traded, in the same year, Qatar Financial Markets Authority was established to organize and supervise the activities of the financial market. and later in 2009 the name of the market was changed from the Doha market to the Qatar Stock Exchange QSE after the partnership agreement with NYSE Euronext.

QSE currently includes 43 companies listed in the main market, as well as fixed income products such as bonds, treasury bills and corporate bonds, in addition to two Exchange-traded fund ETF. There is also a market for small and medium companies created in 2012 to list and fund this type of companies.

Market performance is measured by the main market index QE which measure all sectors performance. Figure 11 demonstrates the monthly performance of the Qatar Market Index for the period 2012-2019 compared to the FTSE Emerging Markets all Cap Index.

Where performance in both indices is parallel in most months, particularly after 2014, when the Qatar Stocks market has been upgraded to emerging market by FTSE.



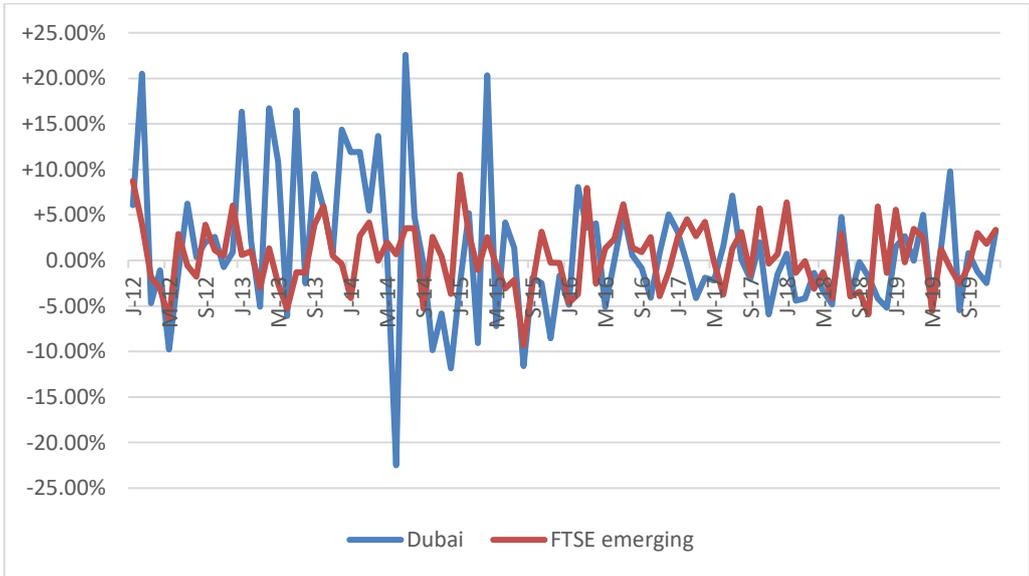
**Figure 11. The monthly return of QE and FTSE Emerging, 2012-2019**

Source: THOMSON REUTERS DATASTREAM

**2.8.3.2. Dubai Financial Market**

Dubai Financial Market DFM was established as the first stocks exchange in UAE by Resolution 14 of 2000 and trading started on March 27 of the same year for 12 listed companies. Dubai Market was established by Resolution 14 of 2000 and trading started on March 27 of the same year for 12 listed companies. In 2005 the legal form of the market was converted into a public joint stock company by initial public offering to become the first demutualized financial market in the region where Dubai Financial Market company had been listed on the market in 2007, in a later step in 2010, the market operations were merged with the NASDAQ Dubai, which expanded the portfolio

of listed companies and the asset classes offered. DFM is regulated by the Securities and Commodities Authority. On the other hand, the numbers indicate that 68 stocks are trading, and with relation to debit instruments, the market provides a group of 40 instruments distributed among Islamic Sukuk, corporate bonds and government bonds. In addition to one Exchange-traded fund. Market performance is measured by the main market index DFM as in figure 12 which shows the overperformance of DFM compared to FTSE Emerging Markets index before 2015 when DFM achieved exceptional performance and was in the list of the best in the world, while the market achieved relatively stable return levels close to what is achieved in other emerging markets in subsequent years.



**Figure 12. The monthly return of DFM and FTSE Emerging, 2012-2019**

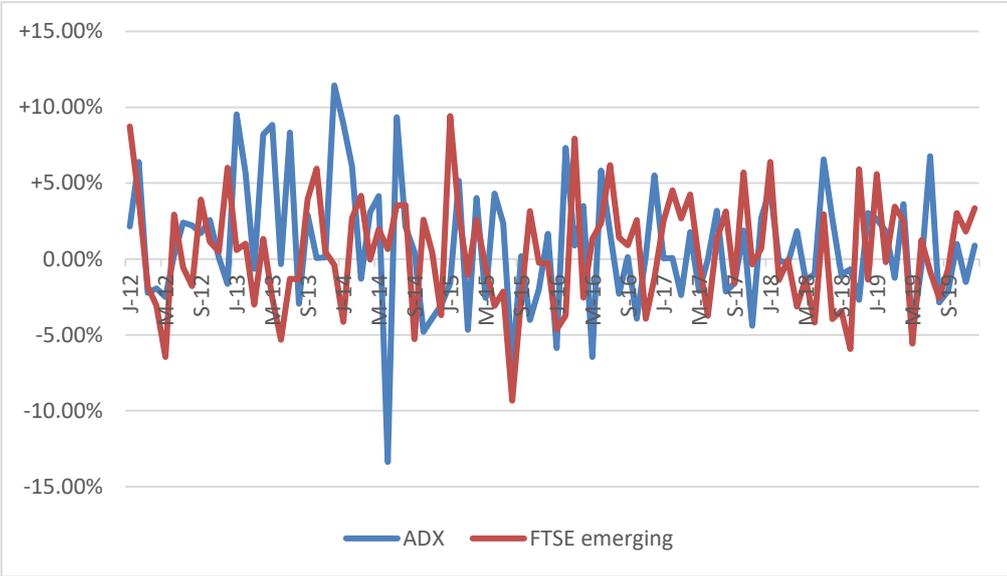
Source: THOMSON REUTERS DATASTREAM

**2.8.3.3. Abu Dhabi Securities Exchange**

Abu Dhabi Securities Exchange ADX was established by the local Law No. 3 of 2000 and actual trading started on November 15 of the same year on the shares of 15 listed companies. The market has several other branches outside the Emirate of Abu Dhabi. Organizationally, ADX is managed by a board of directors consisting of seven members as well as it is subject to the supervision of the Securities and Commodities Authority alongside the Dubai Financial Market. The market portfolio currently includes 70 listed shares, nine bonds and three Exchange-traded funds. In addition to 46 licensed brokerage firms.

Market performance is measured by the general market index that was launched with a par value of 1,000 points as in Figure 13 which displays the performance of the index compared to the FTSE

index, where the general trend indicates a clear correlation between the two indexes during the past four years with ADX index outperforming in most of the months before 2015.



**Figure 13. The monthly return of ADX and FTSE Emerging, 2012-2019**

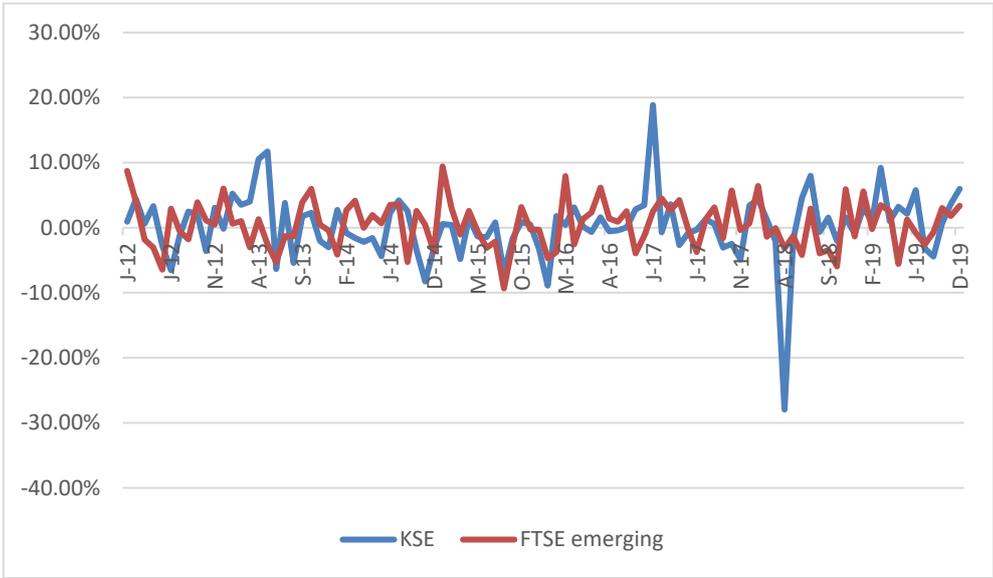
Source: THOMSON REUTERS DATASTREAM

**2.8.3.4. Kuwait Stock Market**

Kuwait has a long experience in financial markets compared to other countries in the region, the activities of the joint stock companies in Kuwait began in the early 1950's with the expansion of oil production and export, but the first legislation of securities trading was in 1962, and the Kuwait Stock Exchange was officially opened in April of 1977 as the first financial market in the Arab Gulf region, and since then the legal framework for the market's work has been modified several times, especially in 1983 after the Al-Manakh stock market crash and in 2013 when the market was renamed as Boursa Kuwait . Subsequently, the market was transformed into a public joint stock company after offering 50% of the capital for public subscription at the end of 2019 in the context of securities industry reforming.

Currently listed companies are classified into three markets based on the criteria of liquidity, capital, and profitability, which are determining the categories of the premier market including 70% of listed companies, the main market composing of companies that do not meet one or more of the premier market requirements, and lastly of the auctions market of companies with low liquidity and few trading in terms of supply and demand. According to 2019 numbers, the market

includes 219 stocks and units of one Real Estate Investment Trust REIT, knowing that Boursa Kuwait development plan includes increasing the types of instruments available for investment. Moreover, the overall monthly market performance did not witness any unusual levels except for two months during 2012-2019 as the premier market index return shows in Figure 14, where the general market trend is relatively stable at 10% up and down which is the same trend of FTSE emerging market index performance.



**Figure 14. The monthly return of KSE and FTSE Emerging 2012-2019**  
 Source: THOMSON REUTERS DATASTREAM

That is, the emerging Arab markets have acceptable levels of performance compared to their counterparts in other regions, knowing that most of them are in oil countries where the economy depends totally on oil revenues to enhance the macroeconomic indicators. It is worth noting that the experience of Arab countries is still relatively recent, as most markets were established in the last decade of the twentieth century. This could provide important future opportunities for the role of these markets in attracting investments and increase their economic contribution, especially if these markets are promoted in international ranking.

### **3. MATERIALS AND METHODS**

The main focus in this research is to test the empirical models of firm value and marketing in Arab markets. According to the nature of variables and in line with related literature, the scientific methodology associated with time series was used to exam the potential relationship between variables involved in the statistical model. This chapter identify sample and target population, research model design steps, definition of research variables and measurement, and the applied statistical tests and techniques.

#### **3.1. Sampling procedure & target population**

The target population of research involves all listed company on the Arab emerging markets according to FTSE classification, four markets were selected (Qatar, Dubai, Abu Dhabi, Kuwait) based on the same economic and social circumstances as well as the structure of financial market, in the next step, the listed companies within the constituents of FTSE Emerging index were identified and specific characteristics had been applied to determine the final sample as following:

- I. Company has accounting data for consecutive years between 2010 and 2019 to exclude the impact of 2008 global financial crisis.
- II. The accounting period ends in 31-December.
- III. The company is considered within FTSE Emerging index constituents for a minimum of four periods.
- IV. The book value is positive for all series years.
- V. The company has a clear branded product or service and operates in a competitive market, that is, it does not have an absolute monopoly position.

The final sample includes 36 companies (360 observations) from the blue chips of the four markets under study as well as divided into six sectors, services, industrial, real state, telecoms, transportation, and financial, knowing that the sample presents more than 60% of trading value in markets they listed on.

Table.12 shows that 44 companies are considered in FTSE Emerging Index constituents which symbolize the most liquid companies in the four markets by 3% of index weight and Cap market of FTSE Emerging Index by 149.6 USD billion. While 36 companies have met the sample requirements by 2.73% of the index weight and 140.8 USD billion as a market Cap which presents 30% of four markets under study in term of market capitalization. Basically, the final selected sample provides an appropriate presentation of four markets nature.

**Table 12. Sample of research**

Criteria	Qatar	Dubai	Abu Dhabi	Kuwait	Total
Market Listed companies	43	68	70	216	397
MCap USD B	160.1	104.4	112.2	96.3	473.0
FTSE Emerging Index constituents	19	8	7	10	44
Weight	1.14%	0.43%	0.5%	0.93%	3%
MCap USD B	56.8	21.4	24.9	46.5	149.6
Sample	16	5	5	10	36
Weight	1.08%	0.31%	0.41%	0.93%	2.73%
MCap USD B	54.4	18.4	21.5	46.5	140.8
MCap Sample percentage	34%	17%	19%	48%	30%

Source: Own calculation based on the data from FTSE Russell. (2020)

### 3.2. Model formulation

Intrinsically, the listed company value is linked to investor expectations about its future through many measures (models) such as future cash flows, dividends, earnings and residual earnings (SULLIVAN AND MCCALLIG, 2009). Likewise, the literature also demonstrated the importance of earning as a proxy for investment appraisal and decision making by shareholders as it reflects more appropriately the information available compared to other models (FRANCIS et al,2000). Wherefore the current research adopts Ohlson (1995) as one of the most important residual earnings-based valuation models which published in 1995, some refinements have been applied later (FELTHAM & OHLSON, 1995, 1996; OHLSON & JUETTNER-NAUROTH, 2005; OHLSON, 2005, 2009). Substantially, the model has gained appreciable attention among relative research due to a logical assumptions and mathematical structure depending on accounting figures.

The starting point of the model is the company's value as a function of expected dividends

$$MV_t = \sum_{i=1}^{\infty} \frac{E(d_{t+i})}{(1+r)^i} \quad (1)$$

Where  $MV_t$  = market firm value at date t,  $E(d_{t+i})$  = the expected dividends received at date t+i; and r = the discount rate that is supposed to be constant within the non-chaotic interest hypothesis

The second assumption of Ohlson states that retained earnings restricted to the profits and dividends of the period which called clean surplus relationship between book value, earnings, and dividends as in equation (2):

$$B_t = B_{t-1} + X_t - d_t \quad (2)$$

Where  $B_t$ = Book value of equity at date t,  $X_t$ = Earnings for period t;  $d_t$  = dividends paid at date t.

Furthermore, normal earnings equal to book value at previous year t-1 multiplied by cost of capital, for that, abnormal earnings are the output of the subtract normal earnings from actual earning

$$X_t^a = X_t - rB_{t-1} \quad (3)$$

Where  $X_t^a$  = abnormal earnings for period t

From (2) and (3), dividends can be expressed as follows

$$d_t = X_t^a + (1 + r)B_{t-1} - B_t \quad (4)$$

In the same logic,  $d_t$  can be replaced in (1)

$$MV_{t=} B_t + \sum_{i=1}^{\infty} \frac{E(X_{t+i}^a)}{(1+r)^i} \quad (5)$$

Equation (5) expresses the residual income valuation model RIV which indicates that the company value in the market can be calculated by adding the discounted value of expected abnormal earnings to the book value of the same period. One of most important advantage of RIV model that the firm value is independent of the accounting choices effect (OTA, 2002)

The third assumption embodies the time series behaviour of abnormal earnings through a linear information dynamic which is considered the most important contribution of the model as it created the link between current information and the intrinsic value according to following equations:

$$X_{t+1}^a = \omega_{11} X_t^a + V_t + \varepsilon_{1t+1} \quad (6a)$$

$$V_{t+1} = \gamma V_t + \varepsilon_{zt+1} \quad (6b)$$

Where:  $X_t^a$  = abnormal earnings per share for the period t which explained in (3);  $V_t$  = other information;  $\omega_{11}, \gamma$  = persistence parameters of abnormal earnings and other information respectively ( $0 \leq \omega_{11}, \gamma < 1$ );  $\varepsilon_{1t}, \varepsilon_{zt}$  = error terms.

By combining RIV model in (5) with linear information dynamic model in (6a) and (6b), the valuation function can be presented in equation (7):

$$MV_t = B_t + a_1 X_t^a + \beta_1 V_t \quad (7)$$

According to Ohlson (1995), the valuation model expressed in (7) conclude that the abnormal earnings are produced by monopoly position of company in product market as well as the returns tend towards the cost of capital in the long run due to competition level. On the other hand,  $V_t$  demonstrates the other information determine the price more than accounting information on other words, the other elements which could play a significant role in investor decision. This assumption is harmonious with marketing- firm value research stream in connection with addition information provided by marketing variables to accounting numbers to forecast stock price (AAKER & JACOBSON, 2001; SULLIVAN & MCCALLIG, 2009). Accordingly, current research uses the marketing investment as a proxy of other information in the model which measured by marketing expenses calculated as selling and general administrative expenses (SG&A) minus R&D expenses (MIZIK & JACOBSON, 2007; LUO, 2008; RYOO, 2016), due to the role of marketing as a long-term investment, marketing expenses had been divided by total assets and lagged by one year as following calculation:

$$Marin_{t-1} = [(SG\&A-R\&D)] / \text{Total assets} \quad (8)$$

Therefore, the main model presented in (8)

$$MV_t = B_t + a_1 X_t^a + \beta_1 Marin_{t-1} \quad (9)$$

Where:  $Marin_{t-1}$  = marketing investment for the period t-1,  $X_t^a$  = abnormal earnings for the period t. where  $r$  = cost of capital calculated by the Capital Asset Pricing Model CAPM (FAMA,1970):

$$r = R_f + \beta_i (R_m - R_f)$$

where:  $R_f$  = risk free return;  $R_m$  the return of the market portfolio;  $\beta_i$ = systematic risk factor of correlation between specific share and market portfolio

Ohlson 1995 model has been used in this research as one of the most common and cited residual earning based model since it provides a logical framework of market value- residual earning linkage on the one hand and taking the other value resources into account on the other hand particularly the goodwill role in value creation (RICHARDSON & TINAIKAR, 2004), which is in line with the concept of intangible marketing assets as a supplement to accounting information of tangible assets which could be an adequate measure to narrow the obvious variation between market value and disclosed accounting information. Marketing efforts can add predictive power to the valuation model in parallel with abnormal earnings, particularly explaining the gap between

the market and book value through creating intangible marketing assets which provides a logical explication of observations related to market value.

### **3.3. Variables description and measurements**

In addition to marketing investment  $Mar_t$ , current research aims to test the impact of three moderator variables under the company governance quality. In addition to some control variable as in table 13. The first moderator variable is ownership structure. Inherently, ownership structure associate with agency theory where some conflicts are produced such as owner-manager conflict and controlling – noncontrolling owners' conflict. The implications of the ownership disparity between shareholders are formed in two directions, the first is monitoring impact which involves the ability of large shareholders to control manager's decisions and thus reducing the possibility of managers harming the interests of shareholders or opportunistic behavior. The second direction is the expropriation impact which involves the negative aspect of large shareholders- minority shareholders conflict assuming that controlling shareholders act in their interest regardless of other owners' interests by transforming recuses and cash flow for their privet benefit which is known as tunnelling phenomenon in other words ownership structure is a vital pillar of the corporate governance system (HANAFI et al, 2018). significantly, higher performance requests less widespread ownership in the light of agency problem (KAPOPOULOS & LAZARETOU, 2007), furthermore, companies with higher marketing expenditure have a higher level of ownership spreading in terms of shareholders number (GRULLON et al, 2004), in current research the ownership structure measured by the percentage of the largest twenty shareholders ownership. In relation to current thesis subject MARTINEZ-GARCIA et al (2020) reported the high level of control by family or state shareholders in Arab Gulf listed companies without a significant impact of ownership on market to book ratio.

The second moderating variable is agency costs which present all costs incurred by the company to ensure that the activities of the agent managers are aligned with the objectives of the principle owners, in other words, to reduce the negative impact of interests' conflict between the two parties. In general, agency costs connect to firm performance by motivating managers to improve the company's results (COLOMBO et al, 2014).

Due to the purpose of this kind of cost, agency costs connect to firm performance through cash flows channel by two aspects, first, high competition level of product market leads to lower agency costs, whereas the limited chance to achieve cash flows surplus compared to competitors pushes shareholders to tighten control over managers' decisions (MITTON, 2004; KARUNA, 2007).

Second, agency costs linked adversely to debt portion in company financial structure since financial leverage guides managers to serve debt and thus the need for cash flow contribute to more profitability actions by managers, on other words, reducing ineffective decisions to invest cash flow surplus (CHENG & TZENG, 2011). From the other side several empirical studies investigate agency costs – ownership structure interconnection, ANG et al (2000) pointed out that these costs are lower in case of managers' ownership or lender banks significant proportion in SMEs that confirmed letter for large companies by SINGH & DAVIDSON (2001). As well as agency costs increase with high ownership widespread and vice versa in the case of managers' ownership (FLEMING et al, 2005; RASHID, 2016). Based on literatures stream, the current research uses asset utilization ratio to measure agency costs by dividing the revenue on assets, this ratio interprets the investment decisions efficiency, where the high ratio refers to less efficient assets allocation (ANG et al, 2000).

The third moderator variable is earnings quality which refers to the level of earning management in order to affect the decisions of stockholders adopted the prepared accounting information (LO, 2008). Alternatively, earning quality measured depending on correlation between accruals and cash flows such as JONES (1991) and DECHOW & DICHEV (2002) model. In relation to governance, auditing committee as a governance mechanism is responsible for controlling the financial reports quality and the degree of earnings management within them (INAAM & KHAMOUSSI, 2016). Basically, correct and fire financial reports leverage the trust of firm stakeholders which in turn enhance the image of company within the players of capital market. the current research uses combined scale of accruals, cashflow and operational efficiency calculated by Thomson Reuters DataStream.

Through their connection to decision making frame in the company, governance quality variables aim to maintenance stakeholders' financial interest including customers and shareholders by enhancing the operational functions in the light of efficient control that interrelated to intangible marketing assets – firm value linkage since the first results from interaction with different parties, where the convenient actions of managers lead to effective cash flow investment which in turn elevates the outcomes of marketing investment.

In relation to control variables, the age of company was included in the model, measured by the number of years since its establishment due to the fact that older company has more accumulated intangible assets and in turn higher capacity to increase operational cash flows (SINGH et al, 2005). Regarding the company performance, operational free cash flow yield was adopted to control the operational efficiency of sample companies. Likewise, to illustrate the economic

conditions in the model, annual change of Brent crude price was added since all markets under study belongs to oil producing countries which could be an appropriate proxy of macro- economy performance. Finally, in order to manifest the brand equity weight of companies under study, the Brand finance report of the 50 most valuable Middle Eastern brand (BRAND FINANCE, 2019) was adopted through dummy variable which given 1 in case the company included in the report for at least one time in the last five years and 0 for opposite case. Table 13 below includes variables coding and description to show the measurement used as well as the data recourse.

**Table 13. Variables of research**

Variable	Code	Description	Recourse
Price	P	Annual Closing price	Thomson Reuters DataStream
Book value	B	Book value in 31-December, equity/ outstanding share number	Thomson Reuters DataStream
Abnormal return	X	= earnings per shar less the normal earning $rB_{t-1}$ $X_t^a = X_t - rB_{t-1}$ where $r = \text{cost of capital}$ calculated by CAPM model $r = R_f + \beta_i (R_m - R_f)$	
	$R_f$	Risk free return measured by the yield on government bonds for ten years	Thomson Reuters DataStream
	$R_m$	The return of the market portfolio	Thomson Reuters DataStream
	$\beta_i$	Systematic risk factor calculated by using moving five years' window (60 months or at least 36) through regression estimation between monthly return of share and market index. $\beta_i = \text{slop} (R_i, R_m)$	Own calculation based on Thomson Reuters DataStream
Marketing investment	<i>Marin</i>	Marketing expenses / total assets	Own calculation based on Thomson Reuters DataStream
Ownership structure	<i>OW</i>	Total ownership percentage of the largest twenty shareholders	Thomson Reuters DataStream
Agency cost	<i>Agco</i>	Asset utilization ratio = sales / total assets	Own calculation based on Thomson Reuters DataStream
Earnings quality	<i>Eaqu</i>	Combined scale accruals, cashflow and operational efficiency of 100	Thomson Reuters DataStream

Variable	Code	Description	Recourse
Size	<i>Size</i>	Ln (total assets)	Thomson Reuters DataStream
Age	<i>Age</i>	Number of years from establishment	Thomson Reuters DataStream
operational free cash flow yalied	<i>FOCF</i>	Operational free cashflows / market value	Thomson Reuters DataStream
Oil	<i>Oil</i>	Annual change of Brent crude price	Thomson Reuters DataStream
Brand equity	<i>Bran</i>	Dummy variable takes 1 in case the company included in brand finance report and vice versa.	Brand Finance publications

Source: Own construction based on literature

### 3.4. Statistical tests used

Following the research objectives and based the research dataset structure, panel data methodology has been adopted to analysis the variables trend as well as the relationships among them. Panel data methodology is preferred in econometrics for their accurate outputs since it considers both the time dimension in the series and the sectional dimension of individual units. In current research, data consists of time series and each cross-sectional part in turn includes a group of observations, which involves annual time series of listed companies' indicators on four markets. Ultimately, econometric model states that time is a conclusive factor in determining the impact of past events on those in the future (ASTERIOU & HALL, 2011).

In line with panel date methodology steps presented in figure 15, a set of statistical methods were used, first, some descriptive statistics were calculated to display the data fundamental criteria such as mean to show the distribution of data, stander deviation to estimate the variability and dispersion of data. In addition to minimum and maximum value to demonstrate the range the date distributes within. Also, correlation test was applied to investigate the initial relationship between dependent variable and independent variables as well as the independent variables with each other to indicates the multicollinearity issue which appear when two or more independent variables are highly correlated to each other.

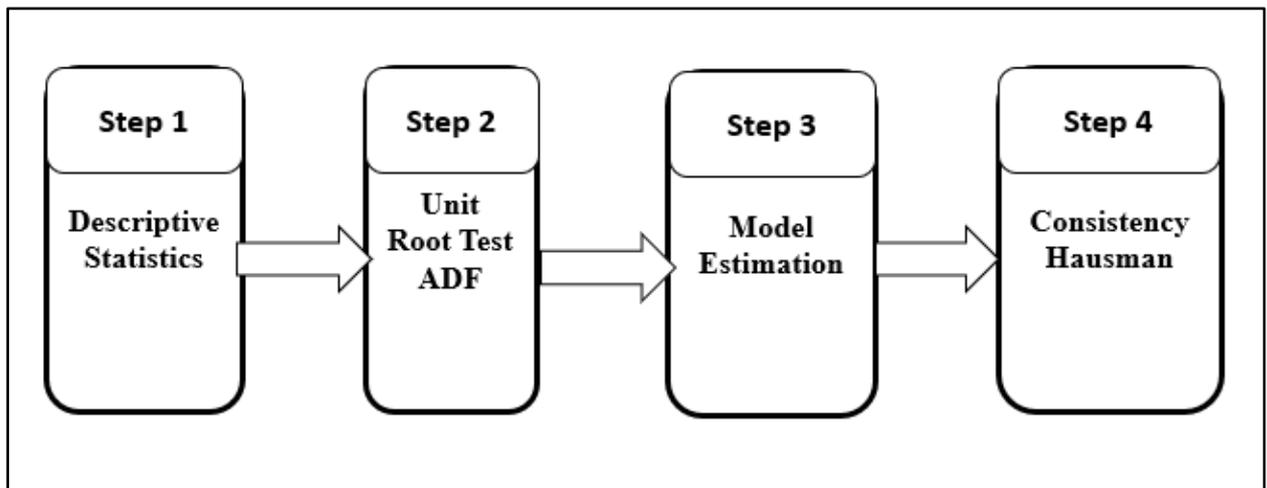
The next step is stationarity checking of model variables by Unit Root Test URT, the stationarity is initial term of model estimation to avoid misleading regression of time series. URT has been conducted by using Augmented Dickey-Fuller ADF (1979). The aim of ADF is to decide the level

of time series stationarity or the number of difference lags whether it is at 0 level ( $X = X_t$ ), at first differenced level ( $X = X_t - X_{t-1}$ ), and at second differenced level ( $X = X_t - X_{t-2}$ ). In other words, ADF provides a proof of trend stationary or difference stationary model data series to explain the regression trend within time series (GREENE, 2011).

The following part related to model estimation to define the fit model which reflects the relationship between dependent and independent variables depending on relative statistics such as determination factor  $R^2$  to determine the explanation percentage of model and adjusted  $R^2$  to excluded sample size effect in addition to F-statistic test of model statistical significance and to test its predictability as well as the validity of the model to represent the relationship between dependent and independent variables statistically.

In the last step, consistency test has been conducted to evaluate the likelihood of endogenous regressors impact in the regression model, the output model could be a Fixed Effects Model FEM, where unobserved heterogeneity variable which are consist over time are controlled by fixed trend over the time therefore the parameters of regression model present a fixed variable, while Random Effects Model REM refers to the case when unobserved heterogeneity variable which are consist over time correlated to independent variables which leads to random trend of time regression. HAUSMAN test (1978) has been used to choose the fit method from consistency point of view where the null hypothesis states that the random effects method is preferred for model while the alternate hypothesis supported the fixed effects model.

All values have been converted to US dollar to ensure homogeneity of data knowing that all used currencies have fixed exchange rate with US dollar. Furthermore, EViews 10 statistical package was used for data analysis and hypothesis test, EViews is adequate package for handling time series methodology including cross-sectional data and Panel data. Regarding data collection, secondary data of fundamental financial figures and data related to share price of sample company extracted from Thomson Reuters Refinitiv DataStream as well as from official websites of markets and companies in case of missing data.



**Figure 15. Panel date methodology steps**

Source: Own construction based on literature

## 4. RESULTS

In this chapter, the steps of statistical test have been presented as well as the outputs of EViews have been analyzed in the framework of research hypothesis to provide an empirical proof of conceptual structure including the relationship between marketing variable and firm value in the markets under study starting from descriptive statistics and correlation, and panel data regression outputs in the later step.

### 4.1. Descriptive statistics

Basically, mean, stander deviation, and maximum and minimum value were presented in tables below for the whole portfolio of all companies as well as for each market individually.

#### 4.1.1. Descriptive statistics of whole portfolio

**Table 14. Descriptive statistics of whole sample portfolio**

	N	Minimum	Maximum	Mean	Std. Deviation
<i>P</i>	360	0.122	12.390	1.6816	1.5406
<i>B</i>	360	0.070	5.820	1.1725	0.9062
<i>X</i>	360	-0.600	2.530	0.0703	0.3027
<i>Marin</i>	360	0.001	0.432	0.0259	0.0172
<i>Mar</i>	360	0.600	3,601	248.623	392.2894
<i>Agco</i>	360	0.005	2.200	0.2290	0.3271
<i>Eaqu</i>	360	1.000	98.00	50.8920	24.8301
<i>OW</i>	360	0.050	0.999	0.4202	0.2362
<i>Age</i>	360	3.000	67.000	26.3900	17.1510
<i>Total Assets USD M</i>	360	101	259,532	23,251	36,857
<i>OIL</i>	360	-0.511	0.323	0.0293	0.2467
<i>FOCF</i>	360	-86.16	80.430	1.8049	12.9726
<i>Beta</i>	360	-0.900	2.440	0.8377	0.5468
<i>P/B</i>	360	0.260	6.650	1.5697	0.9310

Source: Own composition based on EViews outputs

From table 14, the share price *P* of all sample companies ranges between \$ 0.122 and \$ 12.39 with an average of \$ 1.68 and standard deviation by \$1.5, which indicates the superior performance of sample companies compared to the par value that is not more than in \$ 0.32 in the companies under study. Which supported by the average of book value is \$ 1.17 ranges between 0,07 and 5.82 referring to the level of the capital accumulation for sample companies age indicators. In the same manner the youngest company is 13 years old (the establishment date is 3 years before 2010), also

the average of sample companies age is approximately 36.4 years (26.4 years before 2010). With respect to abnormal returns  $X$ , the average is close to \$ 0.07 that could be a reference of operational return level in sample companies that excess of the normal return weighted at cost of capital, put it otherwise, the abnormal return shed light at return on investment based on accounting statements. Regarding the marketing investment *Marin*, values are between 0.001 and 0.43 with average at 0.026, which shows that the average of sample companies marketing expenditure amounts to 2.6 percent of total assets. While the marketing expenditure average at \$ 284 million within a range between \$ 0.6 million and \$ 3,601 million.

In relation to control variables, sample companies differ mightily in size measured by total assets within a range between \$101million and \$ 2,595 million and the mean was \$ 23,251 million as a result of the selected companies' criteria that present the largest list companies on markets under study. Likewise, operational performance measured by free operational cash flow yield ranges between -86.16 and 80.43 with average at 1.8.

In connection to company governance quality, agency cost mean was 22.9% and widely distributed between 0.005 and 2.2 times, similarly, earning quality average was close to 51% within the middle level of financial reports quality and therefore the reliability of accounting figures of sample companies, while the ownership structure reflects a high concentration by average at 42% of the largest twenty shareholders' ownership between 5% and 99%.

On the other hand, Beta average of sample was 0.84 time pointing out to a convergent level of volatility for each individual stock and the market as a whole, meaning that the sample companies approximately have the same risk level of markets because the sample involves most of blue ships companies in markets under study and therefore most of main indexes components of the markets main indices. Finally, the ratio of market to book value P/B ranges between 0.26 and 6.65 times with average at 1.57 times, that provide an evidence of value created by intangible assets in general and marketing assets particularly. Knowing that the average is close to international average at 1.7 and more than the other regions average where it is 1.8 in developed markets, 1.3 in emerging markets, 1.1 in middle East markets (STAR CAPITAL, 2020).

#### **4.1.2. Descriptive statistics of Qatar portfolio**

Table 15 includes a set of descriptive statistics related to Qatar portfolio. The minimum price within the sample companies was \$ 0.32 where the share has been traded at level close to par value (\$ 0.27), while the maximum price was at \$ 6.04 with mean at \$ 1.59, also book value ranges between \$ 0.07 and \$ 2.78 with average at \$1.63 which as in the whole portfolio indicates to good level of retained earnings, and hence a greater margin of safety, supporting the stability of the

company's financial position. Regarding abnormal earning  $X$ , the main is close to 6% while the range of Qatar portfolio between -40% and 42% that could be an acceptable level of performance measured by operational profit. In respect to marketing investment  $Marin$ , the average of marketing expenditure was close to 2.8% of total assets within a range between 0.001 and 43%. The same dispersion degree applies to marketing expenditure value, where the mean was close to \$ 257 million ranging between \$ 0.95 million and \$ 3,601 million.

**Table 15. Descriptive statistics of Qatar market**

Variable	N	Minimum	Maximum	Mean	Std. Deviation
$P$	160	0.32	6.04	1.5913	1.22526
$B$	160	0.07	2.78	1.6277	1.6355
$X$	160	-0.400	0.4201	0.1034	0.1606
$Marin$	160	0.001	0.4324	0.0278	0.1565
$Mar$ $USD M$	160	0.953	3,601	257.456	216.5933
$Agco$	160	0.005	2.200	0.2392	0.397243
$Eaqu$	160	3.00	96	45.3400	23.7792
$OW$	160	0.002	0.999	0.3553	0.22850
$Age$	160	3.00	62.00	24.06	17.730
$Total Assets$ $USD M$	160	108	259,532	20,958	30,292
$FOCF$	160	-86.16	80.43	3.9044	19.2839
Beta	160	-0.38	0.91	0.6705	0.3373
P/B	160	0.47	2,45	2.24	0.2949

Source: Own composition based on EViews outputs

The age of Qatar portfolio companies ranges between 13 and 62 years with average at 34.06 years which is similar to whole portfolio average. Further the size measured by total assets appears a large variance between the Qatari companies due to their different sectors and financing structure. That extended to operational performance measured by free operational cash flows ratio which ranges between -86% and 80 % with average at 3.9%.

The agency cost statistics confirmed operational performance variance where mean was 23.9% within a range between 0.005 and 2.2 times while earning quality mean was 45% ranging between 3% and 96%. Regarding ownership concentration Qatar portfolio companies are within 0.02% and 99% with average at 35.5% that refers to low level of ownership dispersion affects the percentage of floating shares and hence the market liquidity.

With respect to beta, the average of Qatar portfolio was 0.67, meaning that, the return of companies under study depends on market return by 67% with maximum value at 91%. Furthermore, the

market to book ratio ranges between 0.47 and 2.45 times with average at 2.24 which is more than whole portfolio average as well as the global average, generally these figures confirmed the value created by marketing assets.

#### **4.1.3. Descriptive statistics of Dubai portfolio**

Dubai portfolio descriptive statistics present in table 16. Share price P ranges between \$ 0.14 and \$ 3.100 with mean \$ 0.9 which is less than whole portfolio average, the same is in book value B where the minimum value is close to par value in Dubai Securities Market with mean at \$ 0.81 equal to 2.6 times of par value as a signal of capital accumulation. In relation to abnormal earning, the values range between \$ -0.60 and \$ 0.46 with average at \$ 0.04 that refers to the return surplus comparing to cost of capital. Regarding the marketing investment, the average was 4% which is more than whole portfolio average within a range between 0.03% and 46% while the marketing expenditure ranges between \$ 11.2 million and \$ 853.5 million with average at \$ 162.7 million.

The oldest company in Dubai portfolio is 50 years (40 years before time series beginning) while the youngest one is 13 years with average at 28 years which is close to date of Dubai Securities Market launching on 2000 where the market's role in stimulating the establishment of joint stock companies is highlighted. As well as companies of Dubai portfolio vary in size presented by total assets, where the minimum value was \$1,734 million and the maximum was \$ 63,111 million with average at \$ 15,471 million. On the other hand, the average free operation cash flue ratio FOCF was around 3% and minimum value at -54.6% and maximum at 26.5%.

Agency cost ranges between 3.6% and 89.3% with average at 27.6% as an indicator of investment decision efficiency. And earning quality at average was 53.6 among range 6 and 92 that consider the accounting statements at middle level of quality.

Regarding systemic risk, Beta average was 1.16 times between 0.46 and 2,34 times that indicates to higher risk degree of Dubai portfolio which simultaneously related to higher expected return. Finally, the average of market to book value was 1.17 time while the maximum value was around 5 times, that again confirms the value created by intangible marketing assets.

**Table 16. Descriptive statistics of Dubai market**

Variable	N	Minimum	Maximum	Mean	Std. Deviation
<i>P</i>	50	0.140	3.100	0.9018	0.6283
<i>B</i>	50	0.2667	1.8316	0.8136	0.4619
<i>X</i>	50	-0.60	0.461	0.0413	0.1455
<i>Marin</i>	50	0.0029	0.0362	0.0141	0.0301
<i>Mar USD</i>	50	11.200	853.5	162.714	154.4743
<i>Agco</i>	50	0.036	0.893	0.2764	0.2330
<i>Eaqu</i>	50	6.00	92.00	53.65	24.5707
<i>OW</i>	50	0.224	0.602	0.3335	0.0892
<i>Age</i>	50	3	40	18.10	10.266
<i>Total Assets USD M</i>	50	1,734	63,111	15,471	16,715
<i>FOCF</i>	50	-0.546	0.265	0.03246	0.1199
Beta	50	0.4596	2.3365	1.1651	0.4672
P/B	50	0.2600	5.0192	1.1702	0.7584

Source: Own composition based on EViews outputs

#### 4.1.4. Descriptive Statistics of Abu Dhabi portfolio

As presented in table 17, share price average was \$ 1.71 between \$ 0.122 and \$ 5.117 as well as book value ranges between \$ 0.33 around par value and \$ 2,69 with average at \$1.19 that equal approximately 4 times of par value and reflects a good level of capital accumulation. In regard to abnormal return, the average of Abu Dhabi portfolio was \$0.126 within the range between \$ -0.04 and \$ 0.25 indicating to a good level of return on investment.

Marketing investment ranges between 0,001% and 9.8% with average at 1.3% due to the high size of total assets. While the marketing expenditure distributes between \$ 0.6 million and \$1,269 million with average \$379 million which is higher than whole portfolio average.

The age of Abu Dhabi companies ranges between 5 years and 51 years with average at 26.9 years which is close to whole portfolio average. On the other hand, Abu Dhabi companies have a relatively higher size average \$ 45,170 million and between \$ 3,167 and \$ 223,799 million. In regard to free operational cash flow ratio, values of Abu Dhabi portfolio ranges between -0.102 and 0.745 with average at 0.1925, meaning that free operational cash flow covers 19% of market value.

Moreover, agency cost ranges between 2% and 45% with average at 15.9%, and ownership concentration average was 48.3 % within a range between 19.5 % and 70.5% which reflects a high ownership concentration in Abu Dhabi portfolio. In the same logic, earnings quality measurement ranges between 13 and 98 with average at 63.1 that overrides the average of whole portfolio.

On the other hand, companies in Abu Dhabi portfolio enjoy greater return level comparing to market level based on Beta average at 1.37 where the maximum value at 2.4. which supported by market to book value ratio figures with range between 0.32 and 3.68 times and average at 1.26 times, that refers to the role of marketing intangible assets on value creation.

**Table 17. Descriptive statistics of Abu Dhabi market**

	N	Minimum	Maximum	Mean	Std. Deviation
<i>P</i>	50	0.122	5.117	1.70936	1.4181
<i>B</i>	50	0.3282	2.6876	1.1913	0.6426
<i>X</i>	50	-0.04	0.25	0.1259	0.0922
<i>Marin</i>	50	0.001	0.0984	0.0130	0.0173
<i>Mar USD</i>	50	0.600	1,268.8	378.8	321.4141
<i>Agco</i>	50	0.020	0.453	0.1592	0.1472
<i>Eaqu</i>	50	13.00	98.00	63.14	23.7804
<i>OW</i>	50	0.195	0.705	0.4831	0.1840
<i>Age</i>	50	5	51	26.90	15.262
<i>Total Assets USD M</i>	50	3,167	223,799	45,170	44,813
<i>FOCF</i>	50	-0.102	0.745	0.1925	0.1944
<i>Beta</i>	50	0.5062	2.4357	1.3703	0.4942
<i>P/B</i>	50	0.3184	3.6812	1.2560	0.8222

Source: Own composition based on EViews outputs

#### **4.1.5. Descriptive statistics of Kuwait portfolio**

Table 18 involves some descriptive statistics of Kuwait. The mean of share price was \$ 2.203 within a range between \$ 0.732 and \$ 12.390 as well as the book value ranges between \$ 0.318 and \$ 5.824 with mean at \$ 1.532 that indicates the high level of companies' capital accumulation due to the long history of Kuwait Stocks Exchange in 1977 which is reflected in age companies

average at 34 years that extended to abnormal return where the minimum value was \$ -0.02 and \$ 2.56 with average at 0.16 as the highest value comparing to other portfolios under study.

In relation to marketing investment measured by marketing spending to total assets, the mean was 3.3% within a range between 0.08% and 16.4%, while marketing spending ranges between \$ 4.3 million and \$ 766.7 million with average at \$ 210.1 million. The size of Kuwait portfolio companies ranges between \$ 101.2 million and \$ 96.651 with average at \$ 19.998 million. Additionally, free operational cash flow ratio ranges between -0.740 and 2.66 times with average at 0.138. Regarding governance quality variables, Kuwait portfolio companies differ widely in agency cost within a range between 2.8% and 1.06% with mean at 30.5%, similarly ownership concentration ranges between 4.8% and 93.1% with average at 53.6%. while the earning quality average at 52.3.

**Table 18. Descriptive statistics of Kuwait market**

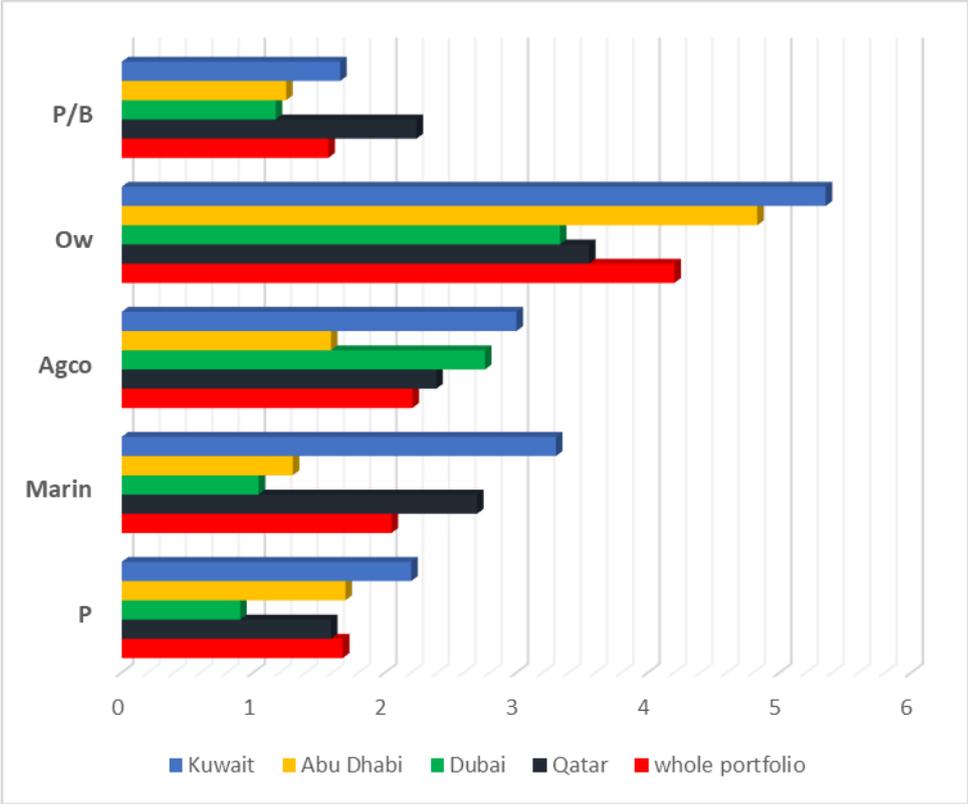
	N	Minimum	Maximum	Mean	Std. Deviation
<i>P</i>	100	0.732	12.390	2.2029	2.1000
<i>B</i>	100	0.318	5.824	1.532	1.2251
<i>X</i>	100	-0.020	2.560	0.15980	0.291631
<i>Marin</i>	100	0.008	0.1642	0.0330	0.0452
<i>Mar USD</i>	100	4.311	766.700	210.100	109.5427
<i>Agco</i>	100	0.028	1.060	0.3052	0.2230
<i>Eaqu</i>	100	1.00	97.00	52.38	24.8300
<i>OW</i>	100	0.048	0.931	0.53587	0.267615
<i>Age</i>	100	6	67	34.00	16.934
<i>Total Assets USD M</i>	100	101.2	96,651	19,998	18,876
<i>FOCF</i>	100	-0.740	2.660	0.1382	0.3885
<i>Beta</i>	100	-0.903	2.037	0.614	0.5131
<i>P\B</i>	100	0.429	4.623	1.662	0.91928

Source: Own composition based on EViews outputs

In respect to systematic risk, beta ranges between -0.903 and 2.037 times with average 0.614 which refers to the correlation degree of portfolio with market return. Likewise, the ratio of market to book value average was 1.6 times within the range between 0.429 and 4.623 times which also

highlights the role of marketing intangible assets in bridging the gap between market value and accounting book value.

Figure 16 includes some variables average of whole portfolio and for each market, where Kuwait portfolio has the highest average value in terms of ownership, agency cost, marketing investment and share price, while Qatar portfolio has the highest average value in market to book ratio.



**Figure 16. Averages of some variables**

Source: Thomson Reuters DataStream

The high values in the Kuwait market because of the history of the market as the oldest market within the markets under study which leads to higher level of accumulating values. In general, the performance levels and the variables value in the four markets are converging, that reflecting the similar geographical and economic situation.

**4.2 Correlation analysis**

Correlation refers to statistical linkage between variables, it is the first step to show the anticipated relationship between variables under stud as well as it indicates the multicollinearity issue which appear when two or more explanatory variables are highly correlated to each other. Generally, multicollinearity issue leads to unfitting results of regression model. In current research, Pearson

correlation coefficient had been used to identify the correlation / independency level between variables within the rang (-1, +1).

**Table 19. Correlation matrix of the variables**

	<i>P</i>	<i>B</i>	<i>X</i>	<i>Marin</i>	<i>Agco</i>	<i>Eaqu</i>	<i>OW</i>	<i>Age</i>	<i>Size</i>	<i>Oil</i>	<i>Bran</i>	<i>FOCF</i>
<i>P</i>	1											
<i>B</i>	0.055	1										
<i>X</i>	.344**	0.092	1									
<i>Marin</i>	0.235**	.161**	0.032	1								
<i>Agco</i>	.240**	.561**	0.092	-0.087	1							
<i>Eaqu</i>	-0.047	-0.009	0.007	0.063	.561**	1						
<i>OW</i>	.151**	0.033	0.074	0.050	0.034	-0.090	1					
<i>Age</i>	.187**	.323**	0.061	-0.082	.319**	.302**	0.101	1				
<i>Size</i>	0.034	.259**	-0.004	0.024	.579**	.608**	0.076	.576**	1			
<i>Oil</i>	-0.045	0.078	.105**	-0.025	0.004	-0.007	-0.049	-0.038	-0.036	1		
<i>Bran</i>	.260	.147**	.138**	0.074**	-.184	.531**	-0.069	.419**	.602**	0.000	1	
<i>FOCF</i>	0.071	.314**	0.017	0.064	0.022	-0.044	0.021	0.059	0.035	0.018	0.026	1

\*\* . Correlation is significant at the 0.05 level (2-tailed).

Source: Own composition based on EViews outputs

Table 19 presents a correlation matrix of research variables, correlation outputs show that there is a significant correlation between the dependent variable price *P* and each of abnormal return *X* (34%), marketing investment *Marin* (23.5%), agency cost *Agco* (24%), ownership *OW* (15.1%), and *Age* (18.7%) where the value of Sig is less than 5% ( $P < 0.05$ ). Furthermore, some independent variables correlated significantly at level of 5% with correlation value less than 70% which can indicate that there is no autocorrelation issue among the independent variables as the first sign before Durbin-Watson test application. Basically, time series data are appropriate for statistical analysis and model estimation can be proceed through panel data regression steps in order to test the research hypotheses.

#### 4.3. Panel data model estimation

In this section, panel data analysis has been conducted to test research hypotheses depending on the three steps, stationarity checking through ADF, model estimation, and consistency through Hausman test for direct impact without moderating variables based on the first hypothesis H1, also moderating impact to determent the effect of moderating variables based on second hypothesis

H2, then for financial and non-financial companies in line with H3 hypothesis and finally, for each market to test H4 hypothesis.

#### 4.3.1. The direct impact of marketing investment on firm value

The three steps of panel data analysis have applied to inference the direct effect model of marketing on market value without governance quality variables and with control variables. First, Augmented Dickey-Fuller ADF was used on order to check model stationarity in the Unit Root Test URT framework which presented in table 20.

**Table 20. Unit root test of direct impact model**

variable	level ADF	1 different ADF	2 different ADF	Order variable
<i>P</i>	4.602 *	-	-	I(0)
<i>B</i>	7.811 *	-	-	I(0)
<i>X</i>	26.100 *	-	-	I(0)
<i>Marin</i>	14.953 *	-	-	I(0)
<i>Age</i>	15.960 *	-	-	I(0)
<i>Size</i>	4.970*	-	-	I(0)
<i>Oil</i>	8.652*	-	-	I(0)
<i>Bran</i>	-7.782*	-	-	I(0)
<i>FOCF</i>	-8.641*	-	-	I(0)

Source: Own composition based on EViews outputs

From above table, all variables show stationarity in their level form I(0) where prob value is less than 5%, meaning that the null hypothesis of unit root is rejected and all variables are integrated of order 0. Consequently, the time series data is fit for model estimation and can go forward in the analysis steps.

The model estimation was examined in the next step as presented in table 21 including balanced panel data with 36 cross sections (companies) for 10 years' time series where share price *P* is the dependent variable. From the table, it can be noted that abnormal earning *X*, marketing investment *Marin*, and size have a significant effect on the dependent variable *P*, where the value of prob is 0.00, 0.0487, 0.00 respectively which is < 5%. While there is no significant effect of *B*, *Age*, *Oil*, *Bran*, and *FOCF* on share price *P* where prob value is more than 5%. Moreover, the value of the coefficient of determination is 60.4 (adjusted 57.5) that indicates that the accepted independent variables explain 57.5% of the variance of dependent variable *P* as well as prob(F-statistic) is less than 5% referring to that the model is statistically significant on the other words, when the abnormal earning, marketing investment, and size increase by one unit, the share price increase by

3.03, 0.226, and 1.18 respectively. The impact of abnormal earning consistent with previous financial research and the same for size as a control variable.

**Table 21. The estimation of direct impact model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 36				
Total panel (balanced) observations: 360				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	-10.2759	1.565831	-6.56259	0.000
<i>B</i>	-0.24551	0.179941	-1.36436	0.1734
<i>X</i>	3.038562	0.350325	8.67355	0.000
<i>Marin</i>	0.226308	0.021341	6.45921	0.0487
<i>Age</i>	0.06969	0.078351	0.88946	0.3744
<i>Size</i>	1.188166	0.189704	6.26328	0.000
<i>Oil</i>	0.068976	0.180079	0.38303	0.702
<i>Bran</i>	-0.302554	0.201674	-1.402743	0.1425
<i>FOCF</i>	0.520099	0.596458	0.87198	0.3839
Weighted Statistics				
R-squared	0.604415	Mean dependent var	1.68159	
Adjusted R-squared	0.575125	S.D. dependent var	1.540646	
S.E. of regression	0.807502	Akaike info criterion	2.521945	
Sum squared reside	206.703	Schwarz criterion	2.986118	
F-statistic	23.56691	Hannan-Quinn criterion	2.706509	
Prob(F-statistic)	0.000	Durbin-Watson stat	1.424371	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	136.505151	8	0.000	

Source: Own composition based on EViews outputs

The last step is to apply Hausman test to choose the fit estimation method in the last part of the table, where the prob value of Chi-Squared test is less than 5%, so the null hypothesis is rejected, and the estimation is by the fixed effects method. As a result, marketing investment affects share price as a proxy of firm value in the market that consistent with the first hypothesis about the direct effect of marketing investment on firm value.

### 4.3.2. The impact of marketing investment on firm value with moderating variables

The research tries to answer the question of the role of the three moderating variables on the relationship of marketing and market value, consequently three moderating variables were added to panel data analysis steps. The unit root test by ADF in table 22 shows that all variables is stationary in their level I(0) since prob value is less than 5% referring to continue in model estimation analysis.

**Table 22. Unit root test of moderating impact model**

Variable	level ADF	1 different ADF	2 different ADF	Order variable
<i>P</i>	4.602 *	-	-	I(0)
<i>B</i>	6.6821*	-	-	I(0)
<i>X</i>	26.100 *	-	-	I(0)
<i>Marin</i>	14.953 *	-	-	I(0)
<i>Age</i>	15.960 *	-	-	I(0)
<i>Size</i>	4.970*	-	-	I(0)
<i>Oil</i>	8.652*	-	-	I(0)
<i>Bran</i>	-7.782*	-	-	I(0)
<i>FOCF</i>	-8.641*	-	-	I(0)
<i>Agco</i>	9.811*	-	-	I(0)
<i>Eaqu</i>	12.430	-	-	I(0)
<i>OW</i>	11.220*	-	-	I(0)

Source: Own composition based on EViews outputs

Table. 23 involves the model estimation of firm value measured by *P* as a dependent variables and book value *B*, abnormal earning *X* With the presence of the three moderating variables: agency cost *Agco*, earning quality *Eaqu* and ownership concentration *OW* in addition to control variables. The table shows that dependent variable *P* is affected scientifically by book value by 0.83, abnormal earning by 1.55, marketing investment by 1.17, size by 0.32, agency cost by 0.97, and ownership concentration by -1.19. further the adjusted R-squared is 0.675 which indicates that the included independent variables explain 67.5% of the dependent variable P variance as well as prob(F-statistic) = 0.0001 is less than 5% referring to that the model is statistically significant. Furthermore, the explanatory power of the model increases with moderating variables comparing to direct impact model as well as Durbin-Watson test value is around 2.00 (1.85) as an indication that the model is free from the autocorrelation issue.

**Table 23. The estimation of moderation impact model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 36				
Total panel (balanced) observations: 360				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	0.274819	1.766444	1.570851	0.000
<i>B</i>	0.83246	0.241914	3.441131	0.001
<i>X</i>	1.545535	0.348268	4.437776	0.000
<i>Marin</i>	1.074819	0.160067	-2.146088	0.0326
<i>Age</i>	0.001923	0.018331	0.104903	0.9165
<i>Size</i>	0.321781	0.207124	1.553569	0.000
<i>Oil</i>	0.104030	0.161514	0.644093	0.5210
<i>Bran</i>	-0.381382	0.201674	-1.402743	0.1425
<i>FOCF</i>	0.520099	0.596458	0.87198	0.3839
<i>Agco</i>	0.978418	0.477059	2.050935	0.0411
<i>Eaqu</i>	0.211591	0.609445	0.347177	0.7290
<i>OW</i>	-1.199772	0.551692	-2.174714	0.0304
Weighted Statistics				
R-squared	0.707425	Mean dependent var	2.202144	
Adjusted R-squared	0.675285	S.D. dependent var	2.100045	
S.E. of regression	0.713772	Akaike info criterion	2.428571	
Sum squared reside	158.9548	Schwarz criterion	2.975657	
F-statistic	29.53694	Hannan-Quinn criter.	2.649987	
Prob(F-statistic)	0.0001	Durbin-Watson stat	1.855991	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	80.4665	11	0.000	

Source: Own composition based on EViews outputs

Further Hausman test outputs show that the prob value of Chi -Squared is 0.000 (less than 5%) which means that model estimation is by the fixed effects method. In regard to model coefficients, the negative coefficient of ownership variable indicates to negative impact of ownership concentration on firm value where high ownership concentration is a distinctive feature of underdeveloped capital markets (VINTILA & GHERGHINA, 2014), generally, the argument of ownership structure role especially institutional ownership on firm value has still been going (ELGHOUTY & EL-MASRY, 2017) where some research concluded the positive role, while

other concluded negative impact (VINTILA & GHERGHINA, 2014; CHARFEDDINE & ELMARZOUGUI, 2010; CLARK, G. L., WÓJCIK, 2005), in current research sample, most of block shareholders are strategic institutional investors who aim to reduce the price volatility with considerable power in decision making as well as in information flow, also they have a high level of shares supply and therefore the market price which consent with expropriation impact assumption. In the same manner, agency cost affects positively on firm value which signifies the efficiency of management decisions where the benefits of agency control exceed the incurred costs and consequently translated positively by the market, this result consistent with previous literature (NAM et al, 2006), while the coefficient of marketing investment is 1.07 that is, the increasing of marketing investment by one unit leads to share value increasing by 1.07 unit, which reemphasize the weight of marketing as an investment that the market responds to through value growth. Subsequently, agency cost and ownership concentration boost the impact of marketing on firm value as an answer of research question about moderating model.

#### 4.3.3. The impact of marketing investment on firm value- sector comparison

To exam the difference between sectors regarding the role of marketing in firm value, the sample was divided into two subsamples, financial companies include 16 companies and non-financial company includes 20 companies, this is due to the small number of companies in the other sectors included in the non-financial division. Panel data analysis was applied to both groups. to show the impact of the sector on the relationship between marketing and firm value.

**Table 24. Unit root test of financial sector model**

Variable	level ADF	1 different ADF	2 different ADF	Order variable
<i>P</i>	-1.16712	-6.44882*	-	I(1)
<i>B</i>	-3.632*	-	-	I(0)
<i>X</i>	0.30277	-7.75019*	-	I(1)
<i>Marin</i>	-5.34624*	-	-	I(0)
<i>Age</i>	-3.82336*	-	-	I(0)
<i>Size</i>	-6.29559*	-	-	I(0)
<i>Oil</i>	-4.5631*	-	-	I(0)
<i>Bran</i>	-1.97167*	-	-	I(0)
<i>FOCF</i>	-7.32673*	-	-	I(0)
<i>Agco</i>	-1.70103*	-	-	I(0)
<i>Eaqu</i>	-2.49694*	-	-	I(0)
<i>OW</i>	-6.11734*	-	-	I(0)

Source: Own composition based on EViews outputs

Table 24 presents ADF unit root of financial sector, where the variables are integrated in different levels, price and abnormal earning X are stationary in the first level I(1) while the remaining variables are stationary in their level I(0). In conjunction with this, model estimation in table 25 shows the model of the relationship between share price and marketing investment as an independent variable in financial sector companies.

**Table 25. The estimation of financial sector model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 16				
Total panel (balanced) observations: 160				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	1.808214	1.330253	1.359301	0.000
<i>B</i>	1.134898	0.209836	5.408506	0.000
<i>X</i>	0.703371	0.8567	8.256528	0.000
<i>Marin</i>	0.69303	0.517037	5.34039	0.0182
<i>Age</i>	0.04023	0.01694	2.37484	0.019
<i>Size</i>	0.002917	0.125741	0.023199	0.9815
<i>Oil</i>	0.066159	0.114607	0.577268	0.5647
<i>Bran</i>	-0.160365	0.201674	-1.402743	0.1620
<i>FOCF</i>	-0.0017	0.002286	-0.74312	0.4587
<i>Agco</i>	0.65201	4.756638	0.137074	0.8912
<i>Eaqu</i>	-0.11167	0.392587	-0.28445	0.7765
<i>OW</i>	-1.18215	1.476975	-2.83156	0.0054
Weighted Statistics				
R-squared	0.602404	Mean dependent var	1.661889	
Adjusted R-squared	0.572213	S.D. dependent var	0.974671	
S.E. of regression	0.32426	Akaike info criterion	0.73898	
Sum squared residue	13.8791	Schwarz criterion	1.260115	
F-statistic	49.82814	Hannan-Quinn criterion	0.950607	
Prob(F-statistic)	0.000	Durbin-Watson stat	1.671518	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	72.5175	11	0.000	

Source: Own composition based on EViews outputs

The financial sector model shows that each of book value, abnormal earning, marketing investment, age of company, and ownership concentration has significant effect on dependent variable  $P$  where Sig value is less than 5% while there is no significant effect of remaining independent variables, meaning that the increasing of marketing investment by one unit leads to increasing by 0.69 in firm value, furthermore, only ownership concentration variably is accepted in the model estimation with a similar negative effect in the whole portfolio. Regarding age of company as a control variable, which is found in previous studies where the new companies face the modernity barriers and lack of stakeholders' recognition unlike older companies that have more marketing assets accumulation hence improving performance (CHENG et al, 2018; SHENG et al, 2011). The explanatory power of model measured by Adjusted R-squared is 57%, meaning that the independent variables explain 57% of dependent variable variance, Also the model is statistically significant based on value Prob(F-statistic) which is less than 5%. Additionally, Hausman test result refers to that model is estimated by the fixed effects method.

In the same logic, the variables of non-financial model the model are not integrated in the same order, price and abnormal earning are stationary in the first level I(1) where sig value is less than 5% at the first difference while the other variables are stationary in their level I(0) as we can see in table 26.

**Table 26. Unit root test of non- financial model**

Variable	level ADF	1 different ADF	2 different ADF	Order variable
$P$	-1.16712	-7.12882*	-	I(1)
$B$	-3.632*	-	-	I(0)
$X$	0.30277	-6.43118*	-	I(1)
$Marin$	-8.01793*	-	-	I(0)
$Age$	-3.82336*	-	-	I(0)
$Size$	-1.80997*	-	-	I(0)
$Oil$	-4.5631*	-	-	I(0)
$Bran$	-1.97167*	-	-	I(0)
$FOCF$	-7.32673*	-	-	I(0)
$Agco$	-1.70103*	-	-	I(0)
$Eaqu$	-2.49694*	-	-	I(0)
$OW$	-8.01793*	-	-	I(0)

Source: Own composition based on EViews outputs

The estimation of non-financial sector is presented in table 27 to show the impact of marketing investment on firm value measured by share price.

**Table 27. The estimation of non- financial model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 20				
Total panel (balanced) observations: 200				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	-0.43947	1.084213	0.40533	0.0457
<i>B</i>	2.259265	0.222078	10.1733	0.000
<i>X</i>	0.890515	0.443282	2.008912	0.0461
<i>Marin</i>	0.324971	1.74305	0.76015	0.0082
<i>Age</i>	0.071747	0.024538	2.923913	0.0039
<i>Size</i>	0.00141	0.522105	2.72342	0.0071
<i>Oil</i>	0.385262	0.273101	1.410695	0.1602
<i>Bran</i>	-0.002574	0.002377	-1.08267	0.2851
<i>FOCF</i>	-0.00536	0.00712	-0.7524	0.4529
<i>Agco</i>	0.65201	4.756638	0.137074	0.8912
<i>Eaqu</i>	-0.77635	0.584327	-1.32862	0.1858
<i>OW</i>	-0.3515	0.758578	-4.02266	0.0001
Weighted Statistics				
R-squared	0.689384	Mean dependent var	1.70805	
Adjusted R-squared	0.658917	S.D. dependent var	1.879618	
S.E. of regression	0.842863	Akaike info criterion	2.638193	
Sum squared reside	119.3503	Schwarz criterion	3.151221	
F-statistic	27.22227	Hannan-Quinn criterion	2.845829	
Prob(F-statistic)	0.000	Durbin-Watson stat	1.829254	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	72.5175	11	0.000	

Source: Own composition based on EViews outputs

The statistical outputs refer to significant effect of book value, abnormal earning, ownership concentration (negative significant), age and size on share price based on Prob value which is less than 5%, in addition to age, size affects the firm value which confirm the role of size in performance. Basically, independent variables explain 65.8% of firm value variance (Adjusted R-square = 0.658) as well as prob value of F-statistic is less than 5% that affirms the significance of model which estimated by the fixed effects method based on Hausman test results.

It is noted that, the non-financial model has higher explanatory power comparing to financial sector model as well as the number of accepted variables is more than financial sector model, that is as a result of financial statements nature in financial sector in term of assets size and high degree of financial leverage which causes a different outputs of accounting variables. Additionally, financial services marketing related to different competition structure that in turn leads to different level of marketing impact on firm value.

#### 4.3.4. The impact of marketing investment on firm value- markets comparison

With the aim of identifying the differences between the markets under study in term of the marketing -firm value relationship, panel data analysis was conducted for each market individually.

##### 4.3.4.1. The impact of marketing investment on firm value in Qatar market

Qatar portfolio involves 16 companies with 160 observations, table 28 presents ADF unit root of Qatar portfolio, where the variables are integrated in their levels at I(0):

**Table 28. Unit root test of Qatar model**

Variable	level ADF	1 different ADF	2 different ADF	Order variable
<i>P</i>	-4.29666*	-	-	I(0)
<i>B</i>	-9.15811*	-	-	I(0)
<i>X</i>	-20.3627*	-	-	I(0)
<i>Marin</i>	-8.86211*	-	-	I(0)
<i>Age</i>	-4.92638*	-	-	I(0)
<i>Size</i>	-9.96203*	-	-	I(0)
<i>Oil</i>	-1.75291*	-	-	I(0)
<i>Bran</i>	-3.97253*	-	-	I(0)
<i>FOCF</i>	-11.9645*	-	-	I(0)
<i>Agco</i>	-6.52049*	-	-	I(0)
<i>Eaqu</i>	-6.98027*	-	-	I(0)
<i>OW</i>	-7.01793*	-	-	I(0)

Source: Own composition based on EViews outputs

The panel data model estimation of Qatar portfolio involves variables coefficients and related statistics to measure the relationship between share price and marketing investment presents in table 29.

**Table 29. The estimation of Qatar model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 16				
Total panel (balanced) observations: 160				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	-2.50732	1.973562	-1.270455	0.2061
<i>B</i>	0.83246	0.241914	3.441131	0.0008
<i>X</i>	3.66327	0.74333	4.928185	0.0000
<i>Marin</i>	0.21159	0.609445	0.347177	0.0290
<i>Age</i>	-0.0058	0.0205	-0.28269	0.7779
<i>Size</i>	0.35304	0.238981	1.477259	0.1421
<i>Oil</i>	-0.30222	0.150906	-2.002718	0.0472
<i>Bran</i>	-0.002354	0.003371	-1.09231	0.2152
<i>FOCF</i>	-0.00165	0.002292	-0.720643	0.4724
<i>Agco</i>	-0.41694	0.351669	-1.185592	0.2379
<i>Eaqu</i>	-0.27776	0.255845	-1.085668	0.2796
<i>OW</i>	-0.21644	0.484934	-0.446337	0.6561
Weighted Statistics				
R-squared	0.85239	Mean dependent var	2.202144	
Adjusted R-squared	0.82331	S.D. dependent var	2.100045	
S.E. of regression	0.41855	Akaike info criterion	2.428571	
Sum squared reside	23.2992	Schwarz criterion	2.975657	
F-statistic	47.2922	Hannan-Quinn criterion	2.649987	
Prob(F-statistic)	0.000	Durbin-Watson stat	1.505991	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	66.45420	11	0.000	

Source: Own composition based on EViews outputs

The table shows that dependent variable is affected significantly by book value, abnormal earning, and marketing investment as in the previous models based on prob value which is less than 5%. In addition to oil price effect with negative coefficient because of sample activities which deal with oil as an input related to cost which in turn affects revenues. Regarding explanatory power, adjusted R-squared value is 0.82, the accepted variables explain 82% of price variance, on the other hand the model is fit for estimation based on F-statistic which is less than 5%. Knowing that the model is estimated by the fixed effects method based on Chi-Squared Statistic results.

#### 4.3.4-2. The impact of marketing investment on firm value in Dubai market

The same steps were applied at Dubai portfolio which contains five companies by 50 observations. The unit root test outputs present in table 30.

**Table 30. Unit root test of Dubai model**

Variable	level ADF	1 different ADF	2 different ADF	Order variable
<i>P</i>	-1.37744	-4.70911*	-	I(1)
<i>B</i>	-0.16491	-4.16303 *	-	I(1)
<i>X</i>	-4.91026*		-	I(0)
<i>Marin</i>	-11.8352*	-	-	I(0)
<i>Age</i>	-2.73231*	-	-	I(0)
<i>Size</i>	-1.62112*	-	-	I(0)
<i>Oil</i>	-6.75733*	-	-	I(0)
<i>Bran</i>	-4.41223*	-	-	I(0)
<i>FOCF</i>	-2.99158*	-	-	I(0)
<i>Agco</i>	-1.02458	-6.54688*	-	I(1)
<i>Eaqui</i>	-7.12031*	-	-	I(0)
<i>OW</i>	-1.09703	-2.46024 *	-	I(1)

Source: Own composition based on EViews outputs

The table shows that, the variables are not integrated on the same level, price, book value, agency cost and ownership concentration are stationary in first difference I(1), while the remaining variables are stationary at their level I(0). Also, model estimation of Dubai market presents in table 31 in regard to variable efficient and model reliability parameters.

The model estimation of Dubai portfolio presents in table 31 to measure the impact of marketing investment on share price in the framework of proposed model. The statistical outputs show a significant effect of Book value, abnormal earning and marketing investment on dependent variable price according to prob value which is less than 5%, in addition to age as a control variable that reemphasizes the importance of company years in building its image for both the customer and the investor. Furthermore, the model is fit for statistical estimation according to F test Prob at level less than 5%, where the accepted independent variables explained 65.5% of dependent variance based on adjusted R -squared at 0.655 as well as the model estimated by fixed effects method based on Prob of Chi-Seq in Hausman test results.

**Table 31. The estimation of Dubai model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 5				
Total panel (balanced) observations: 50				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	-1.22882	1.80443	-0.681001	0.5124
<i>B</i>	0.73998	0.218539	3.386026	0.0017
<i>X</i>	0.3892	0.10264	3.79193	0.0005
<i>Marin</i>	0.39327	0.850522	1.638137	0.0096
<i>Age</i>	0.025754	0.011592	2.221819	0.0323
<i>Size</i>	0.146168	0.196479	0.743938	0.4615
<i>Oil</i>	-0.14585	0.212831	-0.685283	0.4973
<i>Bran</i>	-0.6523	0.489227	-1.333319	0.1904
<i>FOCF</i>	-0.00165	0.002292	-0.720643	0.4724
<i>Agco</i>	-0.41694	0.351669	-1.185592	0.2379
<i>Eaqu</i>	-0.29601	0.59247	-0.499623	0.6202
<i>OW</i>	-0.97314	1.216777	-0.799772	0.4288
Weighted Statistics				
R-squared	0.723587	Mean dependent var	0.90181	
Adjusted R-squared	0.655152	S.D. dependent var	0.628392	
S.E. of regression	0.346954	Akaike info criterion	0.926315	
Sum squared reside	4.574333	Schwarz criterion	1.385201	
F-statistic	11.15781	Hannan-Quinn criterion	1.101061	
Prob(F-statistic)	0.000	Durbin-Watson stat	1.807499	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	27.58752	11	0.000	

Source: Own composition based on EViews outputs

#### 4.3.4.3. The impact of marketing investment on firm value in Abu Dhabi market

According to sample criteria, Abu Dhabi portfolio includes five companies by 50 observations, the analysis steps starts by unit root test in table 32 which shows that marketing investment and ownership are stationary in first difference I(1), while the other variables are stationary in their level I(0)

**Table 32. Unit root test of Abu Dhabi model**

Variable	level ADF	1 different ADF	2 different ADF	Order variable
<i>P</i>	-1.78108*	-	-	I(0)
<i>B</i>	-2.26364*	-	-	I(0)
<i>X</i>	-5.19705*	-	-	I(0)
<i>Marin</i>	0.87934	-12.7265*	-	I(1)
<i>Age</i>	-3.14645*	-	-	I(0)
<i>Size</i>	-3.12999*	-	-	I(0)
<i>Oil</i>	-6.68836*	-	-	I(0)
<i>Bran</i>	-3.52356*	-	-	I(0)
<i>FOCF</i>	-2.95861*	-	-	I(0)
<i>Agco</i>	-4.36761*	-	-	I(0)
<i>Eaqui</i>	-2.31894*	-	-	I(0)
<i>OW</i>	0.83843	-4.75851*	-	I(1)

Source: Own composition based on EViews outputs

The model estimation is presented in table 33 to identify a perfect model of Abu Dhabi portfolio in the context of marketing investment impact of share price as a dependant variable in addition to moderator and control variables.

The model estimation involves a significant effect of book value, abnormal earning, age, and agency cost on price as a dependent variable, unlike the other models there is no significant effect of marketing investment on price. As in other models the positive impact of agency cost returns to its contribution to enhancing the operational performance which translated positively by market. on other hand, the investors focus on companies results during investment decision making based on high value of abnormal earning coefficient (7.05), Basically, Adjusted R-squared value (0.79) shows that the independent variables explain 79% of dependent variance and the model estimated by fixed effects method based on Prob of Chi-Seq in Hausman test results.

**Table 33. The estimation of Abu Dhabi model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 5				
Total panel (balanced) observations: 50				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	4.093581	3.03693	1.34793	0.1857
<i>B</i>	1.075533	0.535603	2.00808	0.0511
<i>X</i>	7.052665	2.887187	2.44275	0.0193
<i>Marin</i>	0.429153	0.26391	1.62613	0.1122
<i>Age</i>	0.038393	0.017768	2.16076	0.0371
<i>Size</i>	-0.54082	0.336953	-1.60503	0.1168
<i>Oil</i>	0.38537	0.334429	1.15232	0.2564
<i>Bran</i>	-0.53421	0.356321	-1.453214	0.1427
<i>FOCF</i>	0.130331	0.431214	0.30224	0.7641
<i>Agco</i>	2.396815	0.893857	2.68143	0.0108
<i>Eaqu</i>	-0.72044	0.914161	-0.78809	0.4355
<i>OW</i>	-0.77307	0.985752	-0.78424	0.4378
Weighted Statistics				
R-squared	0.822482	Mean dependent var	1.70936	
Adjusted R-squared	0.791358	S.D. dependent var	1.418632	
S.E. of regression	0.528223	Akaike info criterion	1.766966	
Sum squared reside	10.60273	Schwarz criterion	2.225851	
F-statistic	28.67532	Hannan-Quinn criterion	1.941712	
Prob(F-statistic)	0.001	Durbin-Watson stat	0.900631	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	35.75501	11	0.000	

Source: Own composition based on EViews outputs

#### 4.3.4.4. The impact of marketing investment on firm value in Kuwait market

Based on FTSE emerging market index, Kuwait portfolio involves 10 companies by 100 observations, the first step of analysis is to test unit root of variables in table 34.

**Table 34. unit root test of Kuwait model**

Variable	level ADF	1 different ADF	2 different ADF	Order variable
<i>P</i>	-1.08947	-4.49711*	-	I(1)
<i>B</i>	1.75161	-9.85652*	-	I(1)
<i>X</i>	-19.1645*	-	-	I(0)
<i>Marin</i>	-8.5532*	-	-	I(0)
<i>Age</i>	-14.6292*	-	-	I(0)
<i>Size</i>	-1.0693	-5.14069*	-	I(1)
<i>Oil</i>	-9.45876*	-	-	I(0)
<i>Bran</i>	-6.64211*	-	-	I(0)
<i>FOCF</i>	-5.61865*	-	-	I(0)
<i>Agco</i>	-4.36761*	-	-	I(0)
<i>Eaqu</i>	-3.50517*	-	-	I(0)
<i>OW</i>	-146.852*	-	-	I(0)

Source: Own composition based on EViews outputs

Based on ADF outputs, the variables are not integrated on the same level, price, book value, and size are stationary in the first difference I(1), while the other independent and control variables are stationary in their levels I(0).

Kuwait model estimation for 10 years presents in table 35 below to explain the relationship between marketing investment and other independent variables on one hand and firm value measured by share price on other hand. The table shows that dependent variable P is affected significantly by book value and marketing investment positively and by ownership concentration negatively which confirms the role of block shareholders in mitigating stock volatility. The accepted independent variables explain 69.4% of dependent variable variance according to Adjusted R-squared value (0.694) as well as the model estimated by fixed effects method based on Prob of Chi-Seq in Hausman test results.

**Table 35. The estimation of Kuwait model**

Dependent Variable: P				
Method: Panel Least Squares				
Sample: 2010 2019				
Periods included: 10				
Cross-sections included: 10				
Total panel (balanced) observations: 100				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
<i>C</i>	-1.16851	3.999471	-0.29217	0.7709
<i>B</i>	2.367091	0.304621	7.770613	0.000
<i>X</i>	3.651432	2.299216	1.58812	0.1163
<i>Marin</i>	.409844	1.087925	2.07578	0.0412
<i>Age</i>	0.042337	0.031775	1.332411	0.1866
<i>Size</i>	0.320374	0.421587	0.759925	0.4496
<i>Oil</i>	0.592213	0.38199	1.550339	0.1251
<i>Bran</i>	-4.114678	2.246798	-1.83135	0.0708
<i>FOCF</i>	-6.409844	3.087925	-2.23781	0.1412
<i>Agco</i>	2.050147	1.939308	1.057154	0.2937
<i>Eaqui</i>	-0.841210	0.823471	-0.87701	0.3455
<i>OW</i>	-0.292062	1.30765	-4.81173	0.000
Weighted Statistics				
R-squared	0.720059	Mean dependent var	2.202144	
Adjusted R-squared	0.694757	S.D. dependent var	1.100045	
S.E. of regression	0.743199	Akaike info criterion	2.428571	
Sum squared reside	43.6352	Schwarz criterion	2.975657	
F-statistic	35.57324	Hannan-Quinn criterion	2.649987	
Prob(F-statistic)	0.000	Durbin-Watson stat	1.755991	
Correlated Random Effects - Hausman Test				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	44.443271	11	0.000	

Source: Own composition based on EViews outputs

#### 4.4. Results summary and hypotheses verification

In this part, all statistical resulted models are summarized in line with hypotheses formulated to show the direct impact of marketing variable on firm value as well as the indirect impact through proposed moderator variables (agency costs, ownership concentration, and earning quality). On the other hand, the experimental methodology has been applied to examine the difference connected to company sector between financial and non-financial sector, and the same regarding

individual difference within the markets under study. Table 36 includes all resulted models with independent variables coefficients and the explanatory power measured by adjusted coefficient of determination.

**Table 36. The Summary of Results**

model	<i>B</i>	<i>X</i>	<i>Marin</i>	<i>Size</i>	<i>Age</i>	<i>Agco</i> <b>H2</b>	<i>Ow</i> <b>H3</b>	<i>Ad-R<sup>2</sup></i>
Direct impact <b>H1</b>		3.038*	0.226*	1.188*				<b>57.5%</b>
Moderating impact	0.832*	1.545*	1.074*	0.321*		0.978*	-1.199*	<b>67.5%</b>
Financial sector <b>H5</b>	1.134*	0.703*	0.693*		0.040*		-1.182	<b>57.2%</b>
Non-financial sector <b>H5</b>	2.259*	0.890*	0.324*	0.0014*	0.071*		-0.351*	<b>65.8%</b>
Qatar <b>H6</b>	0.832*	3.663*	0.211*					<b>82.3%</b>
Dubai <b>H6</b>	0.739*	0.389*	0.393*		0.025*			<b>66.5%</b>
Abu Dhabi <b>H6</b>	1.075*	7.052*			0.038*	2.396*		<b>79.1%</b>
Kuwait <b>H6</b>	2.367*		0.409*				-0.292*	<b>69.4%</b>

\* significant at the 0.05 level

Source: Own composition based on EViews outputs

Both of book value and abnormal return is accepted in seven of eight models which consistent with Ohlson model studies in the light of valuation based on accounting figures as a one of the most important limitation of market value. In other words, share price involves the current and historical accounting performance measures. Further, marketing investment has significant impact of share vale in most of models as a sign of marketing information ability as a substitutional of other information in Ohlson model which compliance with the first hypothesis **H1** about the direct impact of marketing of firm value.

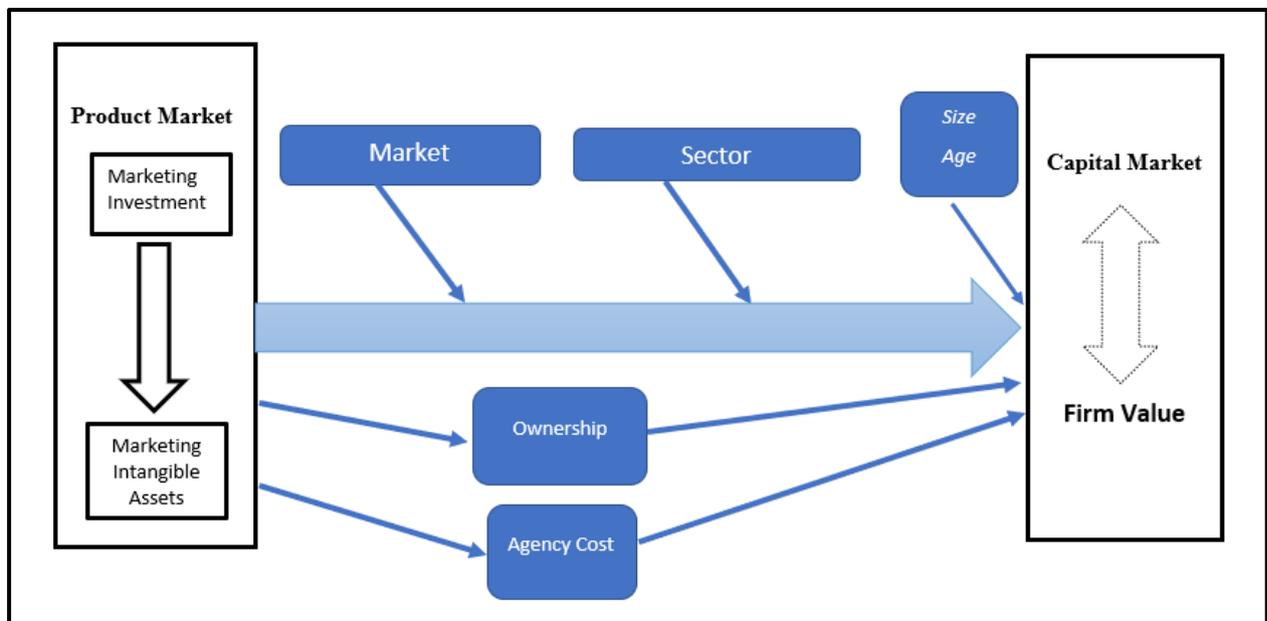
Furthermore, the highest coefficient value of marketing variable is in moderating impact model by 1.07 referring to the role of moderating variables in augmenting efficiency of marketing investment and therefore firm value. Regarding the moderating variables, ownership concentration has negative impact on firm value in four models because of bloke shareholders structure where majority of them belong to strategic investor category who have a long-term investment goals in maintaining relative stability at price level and mitigating fluctuations in line with expropriation

impact assumption and supported hypothesis **H3**. while agency cost as another moderating variable has a positive impact in two models that supports the view that the outcomes of agency expenditure outweigh the cost incurred, in other words, the market interacts positively with corporate governance tools applied by the company that is in line with hypothesis **H2**. Otherwise, the third moderating variable, earning quality has no impact in all models that leads to reject hypothesis **H4** due to the lack of interest of investors in the quality measures of the published accounting data in the markets under study which is consistent with the statement that the investor is not necessarily an accounting and financial expert. while there is no significant effect of earning quality that could be due to the lack of familiarity of investors with the earning quality measurement and its role in the investment decision which, in turn, may be difficult to calculate depending on its models. Principally, the explanatory power increased significantly in the moderating impact model (67.5%) comparing to direct impact model (57.5%). In relation to control variables, company age affects positively on firm value in four models since mature and older companies in the market have greater competitive advantages as engines of value, whether in terms of performance or in terms of mental image and accumulated value of intangible marketing assets, similarly, company size has positive impact on firm value in three models because of larger companies have greater investment potentials and therefore are more distinguished by the various parties whether in the product market or the financial market.

From comparison point of view, model explanatory power of non-financial model is more than its counterpart in financial sector model due to the difference in competition structure where the supply and demand determinations of financial services are not similar to those applied in other goods and services, and therefore marketing practices differ between the two sides and therefore the relationship between marketing investment and firm value, where firm value of financial firms related to many factors not tested in current research, that corresponds to the fifth hypothesis **H5**. The same thing with market models, except for the Abu Dhabi market, marketing investment has a significant influence on market value with individuals' differences regarding model explanatory and dependent variables coefficients. In addition, the accounting numbers including the book value and abnormal earning affect the firm value while it differs in the influence of control variables that are limited in size and age, in general, the coefficient of dependent variables as well as the explanatory power varies between the four markets under study due to individual features of financial and marketing environment which corresponds to the sixth hypothesis **H6**.

In general, The statistical results confirm the findings of financial research in relation to residual earning impact on return, in other words, the informative content of current earning about future

performance (MIZIK & JACOBSON, 2008), in the same time adding marketing variable promote the valuation model power which is harmonious with other information element in Ohlson model and emphasize the mechanisms of cash flows generation via intangible marketing assets or reducing connected cash flow volatility (SRIVASTAVA et al, 1998). Figure.17 demonstrates the final research model depending on statistical result of hypotheses testing:



**Figure 17. Final statistical model of research**

Source: Author's own construction

In summary, based on statistical outputs in empirical analysis, research hypotheses test could be stated as follows:

The first hypothesis **H1 is supported** and there is a statistically significant effect of marketing on firm value in the markets under study.

Hypothesis **H2 is supported** where the agency cost of company moderates the relationship between marketing and firm value.

Hypothesis **H3 is supported** where ownership concentration of company moderates relationship between marketing and firm value.

Hypothesis **H4 is rejected** where the earning quality of company does not moderate the relationship between marketing and firm value

Hypothesis **H5 is supported** and the relationship between marketing and firm value in financial companies differ from non-financial.

Hypothesis **H6 is supported** and the markets under study differ regarding the relationship between marketing and firm value.

#### **4.5. New scientific results**

Current research contributes to the literature on the value relevance of marketing, and it has provided a new scientific proof of marketing financial effect to a growing research trend of marketing-finance interface. It has also provided valuable insights into current literature of valuation approach. Most importantly, it has addressed marketing-based valuation method in the Arabic emerging markets context. The main new significant results are summarized as follow:

First, as never had done before in Arabic emerging markets, this research tested the role of marketing investment in firm value, on other words, the research shed light to the gap between accounting value and market value of which a large portion is due to the intangible marketing assets which in turn play the role of value creator for shareholders. That is, despite the characteristics of the Arab Gulf region, it is consistent with the findings of comparable studies in developed markets or in other geographical regions meaning that current research provides an evidence that capital market response to marketing variables is not limited to a specific economy or region.

Second, the results related to moderator variables shows the importance of governance mechanisms in performance enhancing, so these results added a new evidence of governance impact on firm value literature in emerging markets, on the other hand the current research highlighted the moderating role of agency cost and ownership concentration in marketing-firm value relationship meaning that good corporate governance increase the degree of marketing investment efficiency in value creation. In other words, utilizing the agency costs and ownership effect in the proposed valuation model within marketing, governance, and market value trilogy, provide a promising approach for researchers under interdisciplinary methodology as well as for practitioners to improve performance and achieve goals effectively, whether in the product market or the capital market.

Third, adding marketing variable promotes Ohlson model power, this result indicates the informative content of marketing application beside the traditional accounting figures as the promising approach of firm valuation which can be a valid indicator for investment portfolio diversification on the one hand and effective investment decisions on the other hand. Beside that, the current study provides a new evidence of based residual earning valuation model validity in assessing the market value as an adequate alternative to other valuation models.

Fourth, the research has provided a new accounting - marketing model to understand the interaction between product market/ customer and capital market/ investor through the role of

marketing as a convenient channel to transfer the impact between both sides and to bridge the practical and scientific gap between marketing and finance. That confirms the pivotal and dual role of the marketing function in improving value in capital market side to side to the traditional role in delivering value to customers, which could be a first step in developing a deeper understanding of the interaction between customer and investor behaviour.

Finally, the research has provided a new evidence about the role of marketing intangible assets in firm value, this result contributes to bridge the gap between accounting and market value. In other words, using marketing parameters helps in rationalizing the valuation process and compensates the lack of information about intangible assets in the published financial statements.

## 5. CONCLUSION AND RECOMMENDATIONS

The main purpose of current research is to explore and examine the role of marketing in firm value in four Arabic emerging markets, the direct impact and indirect (moderating) were tested as well as the difference between sectors and markets were investigated, the data analysis results revealed several conclusions which were presented in this session in addition to research implication and some recommendations.

### 5.1. Concluding remarks

Depending on theoretical and practical parts, some remarks points are summarized as follow:

- The marketing concept and related implications have experienced a shift toward a new marketing-finance interface, where the marketing activities contribute to firm value enhancement as well as shareholders and potential investors have become among the key stakeholders of marketing.
- Theoretically, the interaction between marketing and firm value can be discussed under some financial and marketing theories and assumptions such as resource-based theory and signal theory, essentially, marketing elements affect the company cash flow from valuation model point of view, which in turn affects firm value by direct way through intangible marketing assets or indirect way through tangible assets.
- Marketing impact on firm value includes two main sides, the first is the impact of marketing intangible assets such as brand equity, customer equity and R&D equity, while the second is the impact of marketing element such as a new product introduction, advertising and other marketing mix elements.
- market-based assets or marketing intangible assets contribute to value creation because they meet the four specifications: convertible, Scarce, Immutable and no perfect substitute.
- Emerging markets are characterized by having large margins of growth and opportunity from one side and from relatively high risks from another, from marketing point of view, there are some noticed criteria in these markets such as more price sensitivity customer, more costly information, high variance among market segments, high level of competition, and brand investment horizons.
- The performance of four Arabic emerging markets under study is largely consistent with that of other emerging counterparts during the study period.
- The ratio of the market value to the book value ranges between 1.25 and 2.24 times with an average of 1.57 times in the markets under study which is close to international average at 1.7

times and more than emerging markets and middle East markets at 1.3 and 1.1 respectively that refers to the role of intangible assets in value creation in the markets under study.

- The sample companies enjoy a high level of ownership concentration measured by ownership of the largest twenty shareholders, which amount to 99% in some companies with an average at 42%.
- Marketing affects significantly on firm value in direct way through Ohlson model calculation and controlled by size.
- Ownership concentration and agency cost moderate (leverage) the impact of marketing on firm value controlled by size and age, where the model explanatory power increased notably. Moreover, the benefits of agency mechanism outweigh the costs incurred while block shareholders mitigate volatility in stock prices to explain the negative effect of ownership concentration.
- Earning quality has no moderating impact in study model due to the lack of interest of investors in the quality measures of the published accounting data in the markets under study.
- Market response to marketing investment in non-financial companies differs from financial companies based on explanatory power and variables coefficients.
- Market response to marketing investment in each market differs from other markets under study based on explanatory power and variables coefficients due to individual features of customer reaction and thus the investor responses.
- investors respond positively to accounting information based on book value and abnormal earning coefficients in all models that might be an initial signal of efficiency level in the markets under study.

## **5.2. Business implementations**

The results enrich the debate about the reliability of marketing actions for management, the results of research provide a new evidence of marketing role in value creation so managers and decision makers should deal with marketing expenditure as a long term investment on shareholders' value as well as the new trend of marketing augments the organizational power of marketing function as a strategic department responsible for managing and developing the value for both the investor and the customer. That is, marketing objectives must be considered when working to improve accounting performance. Furthermore, the research findings support the importance of marketing intangible assets in investment decision since the investor picks up this signal and reacts accordingly, in other words, marketing actions are translated into financial outputs. Briefly, marketing applications can be an effective tool to obtain a satisfactory evaluation on the market.

### **5.3. Research limitations**

Due to the lack of specialized data bases for the dissemination of marketing information like those in developed markets, the research did not cover all possible marketing variables. On the other hand, the Arab markets are not deep enough in terms of the listed companies' number and eligible companies for listing in the Emerging Markets Index, which led to reducing the number of sample items in general and the small number of companies belonging to some sectors, which affected the possibility of making more detailed comparisons.

### **5.4. Recommendations**

Arabic markets need a specific plan to increase the number of listed companies, and to increase the economic role of capital markets. Furthermore, information is the blood of financial market, so listed companies need to increase the kind and intensity of published information by adopting a disclosure policy that includes data for intangible assets valuation on the one hand and the size of the investment in marketing activities on the other hand, which ensures a permanent flow of information to rationalize investment decisions and avoid tremors in the markets. In the same context, encourage the establishment of specialized institutions to collect and publish this type of information.

For future research, by using the interdisciplinary methodology more marketing variable could be studied in the light of marketing- firm valuation relationship as well as considering other variable as a proxy of firm value or performance could enhance the analysis results. Also, it is strongly recommended to involve more sectors in the future research to shed light on the differences resulting from the marketing practices and their financial impacts. Further, the study of customer-investor interaction would be a fit behavioural approach to promote marketing understanding from a behavioural point of view. Fifth, more empirical studies are requested regarding the new role of digital marketing strategies in firm performance in capital market. Finally, other variables could be studied as a moderator to demonstrate the integrative relationship between marketing and other corporate practices in order to create and maximize value.

## 6. SUMMARY

Nowadays, capital market occupies a prominent place in the economies on the one hand and as a place to evaluate the company's success and management efficiency on the other hand. So, maximizing firm value presents the core objective of all functions within the company including marketing, which has been absent for years from corporate finance literature because of the lack of conviction in the role of marketing measurements for investors from the point of view of the decision-makers. This has changed radically considering the modern trend of marketing depending on the interaction between marketing and financial elements in the framework of the firm's value. A new research stream has addressed marketing-finance interface as cornerstone for a new vision of marketing role as a strategic function that takes into account the interests of shareholders. In general, marketing elements have direct impact on firm value through intangible market-based assets or indirect impact through tangible assets based on accounting performance indicators, market-based assets could contribute to bridging the gap between accounting book value and market value.

Through the literature, several variables were used to measure the marketing in both marketing assets side such as customer or brand equity or from marketing action side such as advertising and marketing spending, knowing that most research have been conducted in developed markets, that was an important motivation of researcher to analyse other markets, practically Arab emerging markets to investigate the marketing impact on firm value with the aim of testing the previous studies findings in the Arab environment, where four Arabic emerging markets were selected namely, Qatar, Dubai, Abu Dhabi, and Kuwait depending on the converging characteristics of these markets, whether in terms of size and depth of the market or in terms of the economic and social structure in general. Moreover, the research investigates the moderating impact of some governance quality specifically, agency cost measured by assets utilization ratio, ownership concentration measured by the sum of the largest 20 shareholders ownership, and earning quality measured by accruals to cash flows model. In addition to that, the research tests the difference between financial and non-financial sectors regarding the marketing impact on firm value as well as the difference between market individually.

The research sample was chosen based on specific criteria from the four markets constituents of FTSE Emerging Index which includes the most liquid companies in the markets under study, 36 companies of 44 were selected for time series of 10 years between 2010 and 2019.

The main model of research was designed based on Ohlson model of valuation which anticipate the share price in terms of book value, abnormal earning as a proxy of accounting information and other unobservable information which presented by marketing investment calculated by marketing expenses deflated by total assets, the model controlled by some variables such as size, age, free operational cash flow ratio, and change in oil price as a proxy of economic situation since all markets under study located in oil countries. The secondary data were collected depending on Thomson Reuters DataStream, official markets websites, Arab monetary fund, and Arab Federation of Exchanges.

The research objectives involve identifying the effect of marketing in firm value, determined the role of moderating effect of agency cost, ownership, and earning quality in marketing-firm value relationship, and determining the sector and market difference.

To achieve the research objective and hypotheses testing, panel data method has been applied because it considers both the time series dimension and the sectional dimension of individual units which applicable for research data.

The results of this research revealed the following main findings:

- ✓ The average of market to book value ratio was 1.57 times in Arabic markets under study which is close to international average at 1.7 times and more than emerging markets and middle East markets at 1.3 and 1.1 respectively that refers to the role of intangible assets in value creation in the markets under study.
- ✓ Marketing investment affects significantly on firm value in Arabic emerging markets under study direct way through Ohlson model calculation and controlled by size.
- ✓ Ownership concentration and agency cost moderate (leverage) the impact of marketing on firm value controlled by size and age, where the model explanatory power increased notably. Moreover, the benefits of agency mechanism outweigh the costs incurred while block shareholders mitigate volatility in stock prices to explain the negative effect of ownership concentration.
- ✓ Market response to marketing investment in non-financial companies differs from financial companies based on explanatory power and variables coefficients.
- ✓ The markets under study different individually regarding the impact of marketing on firm value due to individual features of customer reaction and thus the investor responses.
- ✓ the results confirmed the informative content of marketing application beside the traditional accounting figures as the promising approach of firm valuation which can be a valid indicator

for investment portfolio diversification on the one hand and effective investment decisions on the other hand.

The results of research can be applied in business practices by providing a new evidence of marketing role in value creation, so managers and decision makers should deal with marketing expenditure as a long-term investment on shareholders' value as well as the new trend of marketing augments the organizational power of marketing function as a strategic department responsible for managing and developing the value for both the investor and the customer.

Finally, to enhance the situation of Arabic markets toward the role of intangible assets in value creation, some recommendations have been suggested, furthermore, the research suggest some topics for future research in a framework of interdisciplinary methodology to enrich the marketing – finance theory.

## 7. ÖSSZEFOGLALÁS (SUMMARY IN HUNGARIAN)

Napjainkban a tőkepiac kiemelkedő szereppel bír el egyrészt a gazdaságokban, másrészt a vállalatok sikerének és a menedzsment hatékonyságának értékelésében. Ennélfogva a cégérték maximalizálása jelenti a vállalat valamennyi területének fő célját, ideértve a marketinget is, amely évek óta hiányzott a vállalati pénzügyi szakirodalomból, mivel a döntéshozók nem voltak meggyőződve arról, hogy a marketing értékének mérése a befektetői döntésekben szerepet játszik. Ez mára gyökeresen megváltozott, figyelembe véve a marketing modern irányzatát, a marketing és a pénzügyi tényezők közrehatását a cégérték meghatározásában. Egy új kutatási irányzat a marketing és a pénzügyek kapcsolódási pontjait tekinti a marketing sarokkövének, amelyben a marketing vízionált stratégiai szerepe a részvényesek érdekeit veszi figyelembe. Általában a marketing elemeknek közvetlen hatása van a cégértékre az immateriális piaci alapú eszközökön keresztül, illetőleg közvetett hatásuk van a számviteli teljesítménymutatókon alapuló tárgyi eszközökön keresztül, amelynek révén a piaci alapú eszközök hozzájárulhatnak a könyv szerinti érték és a piaci érték közötti különbség áthidalásához.

A szakirodalomban számos változót használtak a marketing mérésére mind a marketinghez kötődő mérlegtételek, így például az ügyfél- vagy márkaérték meghatározásakor, mind a marketing eszközei kapcsán, például a reklámozásban és a marketing kiadásokban, tudván, hogy a legtöbb kutatást fejlett piacokon végezték, és a tény a jelöltet más, konkrétan az arab feltörekvő piacok elemzésére ösztönözte azzal a céllal, hogy megvizsgálja a marketingnek a cég értékére gyakorolt hatását, tesztelve a korábbi tanulmányok eredményeit arab környezetben. Négy arab feltörekvő piac került kiválasztásra, nevezetesen Katar, Dubai, Abu-Dhabi és Kuvait, e piacok konvergáló jellemzőinek megfelelően, akár a piac méretét és mélységét, akár az általánosságban vett gazdasági és társadalmi struktúrákat tekintjük. Ezenkívül a kutatás vállalatirányítási jellemző hatását vizsgálja, különösképpen az ügynöki költségeket az eszközök kihasználtsági mutatójával összefüggésben, a tulajdonosi koncentrációt a legnagyobb 20 részvényes tulajdonjogának összegével mérten, valamint a jövedelmezőséget az elhatárolásokkal korrigált cash flow modell alapján. Ezen túlmenően a kutatás teszteli a pénzügyi és a nem pénzügyi szektorok közötti különbséget a marketingnek a cég értékére gyakorolt hatása, valamint a piacok vonatkozásában.

A minta a FTSE Emerging Indexet alkotó négy piac alapján került kiválasztásra, az indexben szereplő, a vizsgált piacokon leglikvidebb 44 részvénytársaságból 36 adataival, a 2010 és 2019 közötti 10 éves idősor alapján.

A kutatás fő modellje az Ohlson-féle vállalatértékelési modell alapján került meghatározásra, amelynél a modell a részvény árfolyamát jelzi előre a könyv szerinti érték, illetve a számviteli és egyéb rejtett információk által definiált árbevétel-többlet függvényében, amelynél az utóbbit az összes eszközértékkel deflált marketing költségekkel számolt marketing kiadások jelenti. A modell magyarázó változói között szerepet továbbá a vállalkozás mérete, kora, a szabad működési cash flow aránya és az olaj árának változása a gazdasági helyzet függvényében, tekintettel arra, hogy az összes vizsgált piac olajexportőr országban található. További (másodlagos) adatok forrása a Thomson Reuters DataStream, hivatalos piaci weboldalak, az Arab Monetáris Alap és az Arab Tőzsde Szövetség volt.

A kutatási célkitűzések között szerepelt a marketing vállalatértékre gyakorolt hatásának azonosítása, illetve az ügynöki költségek, a tulajdonosi viszonyok és az árbevétel-összetétel hatásának mérése, a marketing és a vállalatérték viszonyában, tekintettel az ágazati és piaci különbségekre.

A kutatási cél megvalósítása és a hipotézisek tesztelése paneladat-módszerrel történt, amelyet az indokolt, hogy a módszer figyelembe veszi mind az idődimenziót, mind az egyes megfigyelések szektorális dimenzióit, amelyek a kutatási adatokra alkalmazhatók.

A kutatás eredményei a következőkre világítottak rá:

- ✓ A piaci és könyv szerinti érték aránya átlagosan 1,57-szeres volt a vizsgált arab piacokon, ami megközelíti az 1,7-szeres nemzetközi átlagot, és több, mint a feltörekvő piacok 1,3-as és a közel-keleti piacok 1,1-es értékénél, ami az immateriális javak értékteremtő szerepére utal a vizsgált piacokon.
- ✓ A marketingkiadások jelentősen és közvetlenül befolyásolják a vállalatértéket a vizsgált arab feltörekvő piacokon, mégpedig az Ohlson-modell számítási eredményei alapján cégmérettől függően.
- ✓ A tulajdonosi koncentráció és az ügynöki költségek mérséklük (áttételessé teszik) a marketingnek a vállalatértékre gyakorolt hatását; amelynél a cégméret és a működési élettartam bevonásával a modell magyarázó ereje jelentősen megnőtt. Ezenkívül az ügynökélmélet vonatkozásában a tapasztalt előnyök felülmúlják a felmerült költségeket, annak ellenére, hogy a részvényesek megakadályozzák a részvényárfolyamok kiigazítását, ami a magas tulajdonosi koncentráció negatív hatása.
- ✓ A nem pénzügyi társaságokba történő marketing befektetésekre adott piaci válaszok különböznek a pénzügyi vállalatokétól a modell magyarázó ereje és változók együtthatói alapján.

- ✓ A vizsgált piacok külön-külön is különböznek a marketingnek a vállalatértékre gyakorolt hatása szerint, az ügyfél reakcióinak egyedi sajátosságai és így a befektetői reakciók miatt.
- ✓ Az eredmények megerősítették a marketing alkalmazásának informatív voltát a hagyományos számviteli adatok mellett, mint a vállalatértékelés ígéretes megközelítését, amely egyrészt a befektetési portfólió diverzifikációjának, másrészt a hatékony befektetési döntések lehetséges indikátora lehet.

A kutatás eredményei alkalmazhatók az üzleti gyakorlatban azáltal, hogy új bizonyítékot szolgáltatnak a marketing szerepéről az értékteremtésben, amelynek révén a menedzsment és a döntéshozók a marketing kiadásokra úgy tekinthetnek, mint egy eszközre a részvényesi érték hosszú távú növelésében, hasonlóképpen a marketing új trendjére, amelynek során a marketing funkció szervezeti erejét bővítik stratégiai részleggé, mint amely mind a befektető, mind az ügyfél szempontjából értéket teremt és fejleszt.

Végül, az arab piacok helyzetének javítása érdekében a kutatás megfogalmaz néhány ajánlást az immateriális javak értékteremtésben betöltött szerepének növelésére, továbbá néhány témát javasol jövőbeni kutatási céllal az interdiszciplináris módszertan keretében a marketing – pénzügyi elmélet gazdagítására.

## 8. APPENDICES

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**Appendix (2) Research sample companies**

<b>Market</b>	No	company	Sector
<b>Qatar</b>	1	AlMeera	Consumer Goods & Services
	2	Barwa	Real Estate
	3	Ezdan Holding Group	Real Estate
	4	Ooredoo	Telecoms
	5	United Development	Real Estate
	6	Industries Qatar	Industry
	7	Vodafone	Telecoms
	8	Gulf International Services	Industrials
	9	Qatar Navigation	Transportation
	10	Nakilat	Transportation
	11	Commercial Bank	Financial
	12	Doha Bank	Financial
	13	Masraf Alrayan	Financial
	14	Qatar International Bank	Financial
	15	Qatar International Islamic Bank	Financial
	16	Qatar National Bank	Financial
<b>Dubai</b>	17	Arabia Air	Transportation
	18	Arabtec Holding	Real Estate
	19	Emaar Properties	Real Estate
	20	Dubai Investments	Financial
	21	Dubai Islamic bank	Financial
<b>Abu Dhabai</b>	22	Al Dar Properties	Real Estate
	23	Dana Gas	Industrials

	24	Emirates Telecom	Telecoms
	25	Abu Dhabi Commercial Bank	Financial
	26	First Abu Dhabi Bank	Financial
<b>Kuwait</b>	27	Agility Public Warehousing	Consumer Goods & Services
	28	Human Soft Holding	Consumer Goods & Services
	29	Mobile Telecommunication	Telecoms
	30	Boubyan Petrochemical	Industrials
	31	Al Ahli bank of Kuwait	Financial
	32	Bopyan Bank	Financial
	33	Burgan Bank	Financial
	34	Kuwait Financial House	Financial
	35	Gulf Bank	Financial
	36	National Bank of Kuwait	Financial

## Appendix (3) FTSE country classification

The table below shows the FTSE country classification of equity markets as at March 2020.

Developed	Advanced Emerging	Secondary Emerging	Frontier
Australia	Brazil	Chile	Argentina***
Austria	Czech Republic	China*	Bahrain
Belgium/Luxembourg	Greece	Colombia	Bangladesh
Canada	Hungary	Egypt	Botswana
Denmark	Malaysia	India	Bulgaria
Finland	Mexico	Indonesia	Côte d'Ivoire
France	South Africa	Kuwait	Croatia
Germany	Taiwan	Pakistan	Cyprus
Hong Kong	Thailand	Peru****	Estonia
Ireland	Turkey	Philippines	Ghana
Israel		Qatar	Iceland
Italy		Russia	Jordan
Japan		Saudi Arabia**	Kazakhstan
Netherlands		UAE	Kenya
New Zealand			Latvia
Norway			Lithuania
Poland			Macedonia
Portugal			Malta
Singapore			Mauritius
South Korea			Morocco
Spain			Nigeria
Sweden			Oman
Switzerland			Palestine
UK			Romania*****
USA			Serbia
			Slovakia
			Slovenia
			Sri Lanka
			Tunisia
			Vietnam

## Appendix (4) MSCI country classification

MSCI ACWI & FRONTIER MARKETS INDEX									
MSCI ACWI INDEX					MSCI EMERGING & FRONTIER MARKETS INDEX				
MSCI WORLD INDEX			MSCI EMERGING MARKETS INDEX			MSCI FRONTIER MARKETS INDEX			
DEVELOPED MARKETS			EMERGING MARKETS			FRONTIER MARKETS			
Americas	Europe & Middle East	Pacific	Americas	Europe, Middle East & Africa	Asia	Europe & CIS	Africa	Middle East	Asia
Canada	Austria	Australia	Argentina	Czech Republic	China	Croatia	Kenya	Bahrain	Bangladesh
United States	Belgium	Hong Kong	Brazil	Egypt	India	Estonia	Mauritius	Jordan	Sri Lanka
	Denmark	Japan	Chile	Greece	Indonesia	Lithuania	Morocco	Kuwait	Vietnam
	Finland	New Zealand	Colombia	Hungary	Korea	Kazakhstan	Nigeria	Lebanon	
	France	Singapore	Mexico	Poland	Malaysia	Romania	Tunisia	Oman	
	Germany		Peru	Qatar	Pakistan	Serbia	WAEMU <sup>2</sup>		
	Ireland			Russia	Philippines	Slovenia			
	Israel			Saudi Arabia	Taiwan				
	Italy			South Africa	Thailand				
	Netherlands			Turkey					
	Norway			United Arab Emirates					
	Portugal								
	Spain								
	Sweden								
	Switzerland								
	United Kingdom								
MSCI STANDALONE MARKET INDEXES <sup>1</sup>									
						Americas	Europe & CIS	Africa	Middle East
						Jamaica	Bosnia Herzegovina	Botswana	Palestine
						Panama	Bulgaria	Zimbabwe	
						Trinidad & Tobago	Malta		
							Iceland		
							Ukraine		

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Musaab